

DAILY POLYNOMIAL COEFFICIENTS FOR LUNAR COORDINATES

Notes and formulae

On the following pages (previously pages D23–D45 of *The Astronomical Almanac*), for each day of the year, the apparent right ascension (α) and declination (δ) of the Moon are represented by economised polynomials of the fifth degree, and the horizontal parallax (π) is represented by an economised polynomial of the fourth degree.

The formulae to be evaluated are of the form:

$$a_0 + a_1p + a_2p^2 + a_3p^3 + a_4p^4 + a_5p^5$$

where a_5 is zero for the parallax.

The time-interval from 0^h TT is expressed as a fraction of a day to form the interpolation factor p , where $0 \leq p < 1$, and the polynomial is evaluated directly, or by re-expressing it in the nested form:

$$((((a_5p + a_4)p + a_3)p + a_2)p + a_1)p + a_0$$

to avoid the separate formation of the powers of p . Alternatively this nested form for α and δ may be written as:

$$b_{n+1} = b_n p + a_{5-n}, \text{ for } n = 1 \text{ to } 5,$$

where $b_1 = a_5$ and b_6 is the required value. For the parallax a_5 is zero, so that:

$$b_{n+1} = b_n p + a_{4-n}, \text{ for } n = 1 \text{ to } 4,$$

where $b_1 = a_4$ and b_5 is the required value.

The polynomial coefficients are expressed in decimals of a degree, even for α , and the signs are given on the right-hand sides of the coefficients to facilitate their use with small calculators. Subtract 360° from α if it exceeds 360° . In order to obtain the full precision of the polynomial ephemeris the interpolating factor p must be evaluated to 8 decimal places (10^{-3} s); estimates of the precision of unrounded interpolated values are:

RA	Dec	HP
$\pm 0^s 0003$	$\pm 0'' 003$	$\pm 0'' 0003$

Particular care must be taken to ensure that the coefficients are entered with the correct signs.

Example. To calculate the apparent right ascension (α) the declination (δ) and the horizontal parallax (π) for the Moon on 2006 January 21^d 13^h 23^m 48^s.32 UT1, using an assumed value of $\Delta T = 65^s$.

$$\text{TT} = 13^{\text{h}} 24^{\text{m}} 53^{\text{s}}.32, \text{ hence } p = 0.558\ 950\ 46$$

	right ascension	declination	horizontal parallax
b_1	$-0.000\ 1298$	$+0.000\ 2241$	$-0.000\ 008\ 67$
b_2	$+0.000\ 7239$	$+0.001\ 3567$	$+0.000\ 001\ 95$
b_3	$+0.048\ 4758$	$+0.029\ 4710$	$+0.001\ 337\ 26$
b_4	$+0.210\ 1292$	$+0.065\ 7089$	$+0.008\ 434\ 57$
b_5	$+10.805\ 4974$	$-5.625\ 8308$	$\pi = +0.916\ 799\ 94$
b_6	$\alpha = 197.333\ 4698$	$\delta = -8.569\ 4639$	
	$= 13^{\text{h}} 09^{\text{m}} 20^{\text{s}}.033$	$= -8^\circ 34' 10''.07$	$= 55' 00''.480$

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
January 0						
a_0	278.5588 338+	28.2135 289-	1.0018 2168+	29.7552 570+	14.3656 994+	0.9609 5761+
a_1	16.6099 074+	0.8397 072+	0.0084 8139+	12.5513 419+	5.6191 434+	0.0106 9475-
a_2	109 394+	1.0123 718+	19 5103-	1821 726+	3906 985-	2 9078+
a_3	1284 048-	7 326-	1 4267-	336 717+	415 191-	5720+
a_4	25 387+	140 295-	2523+	40 663-	4 925+	832-
a_5	25 832+	6 366+		4 066-	711+	
January 1						
a_0	295.0563 977+	26.3755 753-	1.0082 3460+	42.5179 704+	19.5531 888+	0.9506 0253+
a_1	16.2696 166+	2.8093 257+	0.0042 5238+	12.9984 059+	4.7155 171+	0.0099 7488-
a_2	3331 900-	9324 316+	22 2727-	2547 029+	5115 883-	4 1343+
a_3	937 020-	500 917-	3914-	134 180+	387 285-	2381+
a_4	155 934+	103 637-	2650+	62 407-	8 555+	514-
a_5	2 084+	13 179+		2 847-	2 633+	
January 2						
a_0	310.9149 241+	22.6929 555-	1.0102 4707+	55.7779 718+	23.7195 079+	0.9410 5976+
a_1	15.3855 306+	4.4890 450+	0.0002 1345-	13.5216 850+	3.5808 945+	0.0090 9714-
a_2	5187 575-	7331 930+	21 8762-	2546 412+	6199 977-	4 5499+
a_3	300 727-	785 357-	6899+	140 998-	326 226-	335+
a_4	158 962+	34 999-	2012+	78 277-	22 422+	198-
a_5	12 143-	9 894+		2 201+	3 565+	
January 3						
a_0	325.7663 063+	17.5517 637-	1.0079 3510+	69.5325 906+	26.6503 809+	0.9324 1898+
a_1	14.3153 107+	5.7107 646+	0.0043 0121-	13.9584 650+	2.2537 810+	0.0081 8502-
a_2	5258 012-	4864 759+	18 6323-	1675 815+	7008 325-	4 5398+
a_3	213 677+	829 839-	1 5012+	428 341-	201 686-	435-
a_4	94 274+	14 159+	933+	66 859-	41 298+	65+
a_5	11 597-	3 846+		8 940+	2 184+	
January 4						
a_0	339.5854 512+	11.4357 067-	1.0019 3010+	83.6100 110+	28.1875 089+	0.9246 8424+
a_1	13.3597 281+	6.4423 466+	0.0075 4003-	14.1428 541+	0.8092 177+	0.0072 8750-
a_2	4167 331-	2498 489+	13 6013-	79 438+	7343 707-	4 4540+
a_3	477 528+	737 128-	1 8671+	605 173-	16 494-	146-
a_4	36 221+	32 277+	120-	19 246-	52 564+	247+
a_5	6 669-	224-		11 175+	1 090-	
January 5						
a_0	352.5791 543+	4.8140 186-	0.9932 1543+	97.6994 845+	28.2658 539+	0.9178 4317+
a_1	12.6806 785+	6.7337 031+	0.0097 0506-	13.9750 734+	0.6439 946-	0.0063 9115-
a_2	2583 973-	478 402+	8 0943-	1739 511-	7088 820-	4 5616+
a_3	557 632+	611 260-	1 8054+	573 047-	181 335+	874+
a_4	3 848+	30 305+	830-	38 776+	46 339+	337+
a_5	3 357-	1 892-		6 388+	3 783-	
January 6						
a_0	5.0572 478+	1.9092 398+	0.9828 7319+	111.4478 185+	26.9353 664+	0.9119 2029+
a_1	12.3310 352+	6.6571 811+	0.0108 1555-	13.4739 542+	1.9907 143-	0.0054 3911-
a_2	921 456-	1192 555-	3 1850-	3162 214-	6304 749-	5 0261+
a_3	539 974+	509 017-	1 4609+	357 857-	328 638+	2249+
a_4	12 146-	20 304+	1118-	70 048+	26 452+	338+
a_5	2 485-	1 957-		366-	4 129-	
January 7						
a_0	17.3486 718+	8.3980 984+	0.9718 7404+	124.5767 337+	24.3492 733+	0.9070 0966+
a_1	12.3026 349+	6.2731 091+	0.0110 5905-	12.7619 860+	3.1445 548-	0.0043 5290-
a_2	600 785+	2617 414-	5282+	3819 430-	5201 466-	5 9013+
a_3	466 158+	446 813-	1 0053+	83 382-	393 930+	3620+
a_4	24 234-	10 134+	1073-	66 420+	5 429+	266+
a_5	3 206-	990-		3 897-	2 723-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
January 16						
a_0	136.9546 907+	20.7242 356+	0.9032 8576+	226.3262 789+	21.0408 511-	0.9465 9900+
a_1	11.9977 044+	4.0658 567-	0.0030 5336-	13.0925 873+	4.3708 363-	0.0148 3971+
a_2	3710 196-	4014 310-	7 1435+	5967 051+	4309 782+	8 3874+
a_3	143 290+	389 396+	4699+	302 009+	605 853+	1 3299-
a_4	45 846+	8 068-	145+	63 607-	35 214+	1568-
a_5	3 904-	1 002-		12 127-	4 766-	
January 17						
a_0	148.5998 986+	16.2949 804+	0.9009 9518+	240.0381 985+	24.9170 791-	0.9621 2879+
a_1	11.3150 397+	4.7556 268-	0.0014 7790-	14.3451 012+	3.3154 282-	0.0160 5542+
a_2	3044 345-	2904 515-	8 6353+	6369 260+	6290 937+	3 4639+
a_3	288 460+	347 838+	5286+	69 692-	695 530+	1 9717-
a_4	26 069+	12 833-	7-	130 385-	11 191+	1352-
a_5	2 442-	273+		5 624-	11 094-	
January 18						
a_0	159.6417 125+	11.2824 299+	0.9004 3358+	254.9996 556+	27.5338 510-	0.9783 1991+
a_1	10.8019 170+	5.2371 741-	0.0004 0743+	15.5431 024+	1.8496 539-	0.0161 0250+
a_2	2046 958-	1935 237-	10 2112+	5321 091+	8333 203+	3 2388-
a_3	369 146+	299 702+	5262+	636 035-	628 646+	2 5320-
a_4	13 990+	11 286-	180-	162 381-	47 963-	595-
a_5	1 026-	1 069+		14 941+	12 670-	
January 19						
a_0	170.2771 449+	5.8806 807+	0.9019 1295+	270.9965 197+	28.4933 834-	0.9938 3939+
a_1	10.5083 534+	5.5382 901-	0.0026 0035+	16.3590 443+	0.0199 299-	0.0146 7126+
a_2	865 810-	1093 139-	11 6759+	2589 379+	9804 110+	11 1509-
a_3	415 326+	265 555+	4551+	1128 473-	315 012+	2 7851-
a_4	9 102+	5 849-	374-	78 715-	115 203-	727+
a_5	206-	1 591+		29 423+	3 878-	
January 20						
a_0	180.7413 396+	0.2592 065+	0.9057 2266+	287.4967 255+	27.5133 090-	1.0071 2433+
a_1	10.4633 275+	5.6787 946-	0.0050 5711+	16.5215 897+	1.9873 893+	0.0116 3462+
a_2	432 765+	315 636-	12 8098+	972 697-	1.0019 375+	19 0229-
a_3	449 685+	258 311+	3067+	1155 684-	177 947-	2 4921-
a_4	8 384+	2 176+	600-	78 353+	133 014-	2274+
a_5	185-	1 998+		17 007+	8 078+	
January 21						
a_0	191.2937 320+	5.4249 032-	0.9120 8543+	303.8150 131+	24.5542 705-	1.0166 3019+
a_1	10.6880 456+	5.6625 588-	0.0076 8711+	16.0201 666+	3.8887 180+	0.0071 7350+
a_2	1830 337+	492 361+	13 3617+	3799 973-	8768 806+	25 1014-
a_3	480 711+	287 127+	680+	683 985-	626 832-	1 5568-
a_4	7 965+	12 314+	867-	160 439+	88 566-	3377+
a_5	1 298-	2 241+		4 282-	12 074+	
January 22						
a_0	202.2135 492+	11.0080 578-	0.9211 0685+	319.4023 994+	19.8590 041-	1.0211 7164+
a_1	11.2008 603+	5.4719 034-	0.0103 4519+	15.1170 017+	5.4250 370+	0.0018 2145+
a_2	3307 388+	1450 094+	13 0364+	4933 041-	6477 906+	27 7438-
a_3	497 945+	358 554+	2782-	89 900-	862 201-	1683-
a_4	2 232+	23 941+	1165-	132 663+	26 499-	3445+
a_5	4 122-	1 886+		12 287-	8 608+	
January 23						
a_0	213.7947 538+	16.2965 137-	0.9327 1621+	334.0291 446+	13.8741 858-	1.0202 3633+
a_1	12.0105 480+	5.0638 016-	0.0128 2240+	14.1503 478+	6.4556 565+	0.0036 3983-
a_2	4773 447+	2688 398+	11 4944+	4529 967-	3818 334+	26 2120-
a_3	463 014+	472 001+	7464-	319 167+	884 955-	1 2378+
a_4	17 942-	34 309+	1440-	69 033+	16 215+	2443+
a_5	8 749-	65-		9 670-	3 645+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
	February 1			February 9		
a_0	347.7643 487+	7.1232 054-	1.0141 2350+	94.3255 144+	28.5149 925+	0.9175 7119+
a_1	13.3628 874+	6.9621 415+	0.0084 1314-	13.9413 218+	0.3382 210-	0.0075 7252-
a_2	3254 916-	1297 089+	21 0793-	1448 134-	7101 963-	8 8755+
a_3	500 955+	785 664-	2 2200+	527 482-	147 374+	2005-
a_4	21 132+	33 624+	920+	24 473+	41 221+	126-
a_5	5 484-	182+		6 692+	2 668-	
	February 2			February 10		
a_0	0.8534 048+	0.1065 408-	1.0038 3363+	108.0723 913+	27.4851 680+	0.9108 6492+
a_1	12.8679 043+	6.9993 987+	0.0119 2627-	13.5065 793+	1.6992 474-	0.0058 6258-
a_2	1679 977-	856 455-	13 9093-	2816 841-	6439 296-	8 2055+
a_3	531 901+	650 295-	2 5743+	365 865-	285 193+	2487-
a_4	5 410-	33 793+	441-	57 829+	27 147+	93+
a_5	3 332-	1 415-		942+	3 316-	
	February 3			February 11		
a_0	13.6056 272+	6.7454 206+	0.9907 6944+	121.2665 771+	25.1728 934+	0.9057 9896+
a_1	12.6876 492+	6.6458 286+	0.0139 5360-	12.8570 497+	2.8923 473-	0.0042 9234-
a_2	149 995-	2618 825-	6 4767-	3558 253-	5454 056-	7 5201+
a_3	477 087+	529 322-	2 3782+	127 292-	361 064+	2092-
a_4	21 566-	26 141+	1257-	61 138+	10 176+	246+
a_5	3 117-	1 474-		2 851-	2 488-	
	February 4			February 12		
a_0	26.3235 174+	13.0789 012+	0.9763 9342+	133.7609 011+	21.7720 157+	0.9022 4017+
a_1	12.7905 915+	5.9729 878+	0.0145 8583-	12.1302 404+	3.8720 113-	0.0028 4122-
a_2	1120 667+	4064 743-	1045-	3601 979-	4334 681-	7 0428-
a_3	359 467+	438 889-	1 8599+	88 329+	377 618+	1084-
a_4	37 331-	18 380+	1513-	45 784+	2 239-	329+
a_5	3 511-	409-		3 532-	1 201-	
	February 5			February 13		
a_0	39.2580 382+	18.6033 230+	0.9619 6800+	145.5440 016+	17.5039 541+	0.9000 9569+
a_1	13.1058 786+	5.0355 219+	0.0141 0933-	11.4528 918+	4.6271 569-	0.0014 5199-
a_2	1939 814+	5275 231-	4 5710+	3097 675-	3227 239-	6 9154+
a_3	175 631+	368 552-	1 2460+	236 712+	357 258+	255+
a_4	55 925-	16 265+	1390-	27 727+	8 061-	340+
a_5	2 571-	1 185+		2 534-	150-	
	February 6			February 14		
a_0	52.5696 117+	23.0762 116+	0.9484 2647+	156.7133 164+	12.5889 779+	0.8993 4119+
a_1	13.5228 801+	3.8770 099+	0.0128 7694-	10.9141 953+	5.1687 259-	0.0000 4765-
a_2	2105 248+	6271 384-	7 4843+	2246 524-	2205 306-	7 1941+
a_3	71 518-	291 033-	6868+	323 014+	323 907+	1636+
a_4	70 132-	22 633+	1086-	15 084+	8 658-	282+
a_5	1 331+	2 281+		1 286-	536+	
	February 7			February 15		
a_0	66.2889 847+	26.2994 712+	0.9363 5578+	167.4365 405+	7.2312 998+	0.9000 3214+
a_1	13.8950 931+	2.5456 164+	0.0112 1749-	10.5671 861+	5.5158 100-	0.0014 5156+
a_2	1483 201+	6985 757-	8 9040+	1199 821-	1280 162-	7 8506+
a_3	335 566-	178 009-	2523+	370 995+	294 891+	2784+
a_4	63 472-	34 838+	735-	8 831+	5 894-	163+
a_5	7 000+	1 736+		439-	988+	
	February 8			February 16		
a_0	80.2931 941+	28.1323 685+	0.9260 4658+	177.9216 832+	1.6164 721+	0.9022 9823+
a_1	14.0691 775+	1.1098 631+	0.0093 9037-	10.4418 335+	5.6852 384-	0.0031 1174+
a_2	165 963+	7293 336-	9 2305+	38 216-	420 961-	8 7783+
a_3	517 939-	22 534-	402-	402 061+	281 399+	3453+
a_4	26 348-	43 941+	405-	6 866+	899-	11-
a_5	9 752+	461-		207-	1 338+	

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 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
February 17						
a_0	188.4005 670+	4.0826 786-	0.9063 2222+	296.5040 556+	26.2258 740-	1.0029 3196+
a_1	10.5574 504+	5.6847 013-	0.0049 7058+	15.9521 212+	3.0330 975+	0.0133 0227+
a_2	1207 127+	431 237+	9 8009+	1902 594-	9240 439+	13 8228-
a_3	427 104+	291 326+	3427+	809 290-	320 239-	2 7851-
a_4	6 159+	5 878+	234-	105 627+	100 943-	971+
a_5	784-	1 594+		5 634+	6 975+	
February 18						
a_0	199.1219 781+	9.6943 764-	0.9123 0481+	312.1961 145+	22.3101 532-	1.0145 8316+
a_1	10.9290 766+	5.5079 081-	0.0070 2421+	15.3738 688+	4.7482 253+	0.0097 4106+
a_2	2517 617+	1356 460+	10 6799+	3640 959-	7744 100+	21 5458-
a_3	442 886+	330 736+	2506+	337 636-	653 535-	2 3912-
a_4	2 725+	14 080+	508-	129 691+	64 075-	2593+
a_5	2 516-	1 548+		7 022-	8 063+	
February 19						
a_0	210.3471 258+	15.0320 022-	0.9204 1699+	327.1843 906+	16.8584 726-	1.0219 5646+
a_1	11.5652 941+	5.1309 908-	0.0092 1506+	14.5927 485+	6.0793 842+	0.0048 1842+
a_2	3837 515+	2448 704+	11 1170+	3946 462-	5479 753+	27 1315-
a_3	426 845+	401 988+	489+	109 279+	830 354-	1 3235-
a_4	9 424-	22 347+	829-	91 054+	23 208-	3645+
a_5	5 607-	652+		9 541-	5 970+	
February 20						
a_0	222.3373 529+	19.8756 239-	0.9307 4035+	341.4015 721+	10.3158 722-	1.0239 6584+
a_1	12.4542 741+	4.5113 919-	0.0114 1997+	13.8678 933+	6.9199 275+	0.0008 5890-
a_2	5005 326+	3795 392+	10 7555+	3167 833-	2909 118+	28 9180-
a_3	331 312+	496 390+	2826-	379 405+	864 959-	1752+
a_4	38 103-	26 448+	1177-	42 621+	6 510+	3540+
a_5	8 819-	1 908-		7 061-	3 420+	
February 21						
a_0	235.3205 984+	23.9553 837-	0.9431 9584+	354.9941 786+	3.1905 358-	1.0202 6806+
a_1	13.5350 839+	3.5937 767-	0.0134 3921+	13.3616 687+	7.2465 748+	0.0064 4816-
a_2	5681 956+	5424 233+	9 1923+	1844 442-	387 445+	26 3045-
a_3	91 668+	580 625+	7563-	480 603+	805 914-	1 6183+
a_4	85 506-	17 395+	1484-	7 818+	23 293+	2340+
a_5	7 481-	6 246-		4 734-	1 366+	
February 22						
a_0	249.4237 459+	26.9475 597-	0.9574 6381+	8.2197 717+	4.0166 581+	1.0113 7467+
a_1	14.6610 455+	2.3309 115-	0.0149 9137+	13.1377 221+	7.0922 888+	0.0111 2998-
a_2	5368 474+	7207 819+	6 0292+	403 006-	1876 944-	20 0961-
a_3	318 596-	585 869+	1 3590-	465 010+	699 770-	2 5555+
a_4	127 332-	15 176-	1611-	15 356-	29 677+	697+
a_5	3 973+	9 709-		3 966-	162+	
February 23						
a_0	264.5774 433+	28.5015 908-	0.9729 0609+	21.3617 621+	10.8542 595+	0.9984 9759+
a_1	15.5902 321+	0.7245 087-	0.0157 2498+	13.1884 989+	6.5189 207+	0.0143 5475-
a_2	3688 698+	8776 857+	9942+	860 205+	3796 645-	12 0538-
a_3	779 777-	429 412+	2 0199-	364 013+	579 510-	2 8174+
a_4	105 530-	66 729-	1344-	35 290-	30 010+	675-
a_5	19 439+	7 463-		3 915-	49+	
February 24						
a_0	280.4499 585+	28.3128 919-	0.9885 1507+	34.6687 623+	16.9385 706+	0.9832 1244+
a_1	16.0615 470+	1.1292 718+	0.0152 6398+	13.4536 721+	5.5977 682+	0.0159 4740-
a_2	911 773+	9589 924+	5 8447-	1701 204+	5354 659-	4 0305-
a_3	1006 946-	92 255+	2 5783-	184 473+	458 573-	2 5266+
a_4	171+	105 165-	480-	55 844-	30 030+	1434-
a_5	20 502+	446+		2 677-	787+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
March 5						
a_0	48.3051 500+	21.9580 972+	0.9671 0032+	153.9012 751+	13.9274 982+	0.8995 2453+
a_1	13.8255 834+	4.4016 703+	0.0160 5294-	11.0122 266+	5.0644 318-	0.0001 2043-
a_2	1892 593+	6542 295-	2 6830+	2348 451-	2507 577-	8 2129+
a_3	63 322-	330 265-	1 9380+	314 348+	319 360+	3645-
a_4	70 533-	34 256+	1622-	13 719+	6 181-	243+
a_5	1 395+	1 402+		1 346-	588+	
March 6						
a_0	62.3067 466+	25.6760 774+	0.9514 9326+	164.7113 287+	8.6436 856+	0.9001 9138+
a_1	14.1575 956+	3.0085 347+	0.0149 9987-	10.6416 560+	5.4723 170-	0.0014 2256+
a_2	1293 375+	7313 439-	7 5284+	1336 546-	1580 681-	7 2677+
a_3	328 325-	179 613-	1 2814+	356 244+	300 653+	2653-
a_4	63 491-	41 915+	1458-	7 125+	3 137-	317+
a_5	7 079+	734+		533-	821+	
March 7						
a_0	76.5552 060+	27.9395 718+	0.9373 5978+	175.2556 136+	3.0431 341+	0.9023 1735+
a_1	14.2959 190+	1.5090 941+	0.0131 6811-	10.4838 033+	5.6991 017-	0.0028 0919+
a_2	1 458-	7593 404-	10 5074+	230 377-	689 328-	6 6622+
a_3	510 044-	5 713-	6961+	379 576+	296 376+	1363-
a_4	25 943-	45 872+	1145-	4 656+	1 017+	326+
a_5	9 719+	1 231-		299-	954+	
March 8						
a_0	90.7983 525+	28.6932 183+	0.9253 0058+	185.7547 725+	2.6950 659-	0.9057 8239+
a_1	14.1370 931+	0.0064 308+	0.0109 0361-	10.5533 130+	5.7471 709-	0.0041 1379+
a_2	1589 774-	7347 686-	11 9187+	933 329+	215 453+	6 4469+
a_3	518 353-	164 488+	2385+	394 959+	310 012+	34-
a_4	24 675+	39 254+	813-	3 437+	5 845+	261+
a_5	6 567+	2 972-		748-	1 021+	
March 9						
a_0	104.7277 569+	27.9849 576+	0.9156 0456+	196.4411 831+	8.3890 037-	0.9105 4314+
a_1	13.6767 792+	1.3995 443-	0.0084 8083-	10.8594 653+	5.6082 283-	0.0054 1262+
a_2	2931 141-	6648 509-	12 1558+	2131 383+	1190 799+	6 5890+
a_3	357 192-	291 657+	852-	400 448+	343 519+	1035+
a_4	57 381+	23 718+	514-	33+	11 115+	118+
a_5	833+	3 178-		2 073-	889+	
March 10						
a_0	118.0815 243+	25.9517 821+	0.9083 2566+	207.5536 275+	13.8425 999-	0.9166 2619+
a_1	13.0067 581+	2.6338 499-	0.0060 9576-	11.4048 503+	5.2621 235-	0.0067 6621+
a_2	3650 314-	5663 055-	11 5998+	3312 219+	2296 986+	6 9636+
a_3	121 506-	355 335+	2893-	378 555+	396 449+	1530+
a_4	60 153+	7 535+	262-	10 087-	15 910+	100-
a_5	2 892-	2 120-		4 335-	203+	
March 11						
a_0	130.7168 264+	22.7877 017+	0.9033 5834+	219.3261 131+	18.8337 685-	0.9241 0306+
a_1	12.2628 579+	3.6579 049-	0.0038 7305-	12.1746 561+	4.6773 281-	0.0082 0084+
a_2	3683 001-	4573 023-	10 5814+	4343 932+	3583 900+	7 3540+
a_3	89 745+	365 021+	3927-	293 623+	461 100+	1150+
a_4	44 608+	2 967-	53-	32 247-	17 447+	382-
a_5	3 544-	821-		6 598-	1 526-	
March 12						
a_0	142.6244 650+	18.7086 178+	0.9005 0363+	231.9606 403+	23.1050 046-	0.9330 4697+
a_1	11.5692 532+	4.4645 992-	0.0018 7669-	13.1153 330+	3.8160 056-	0.0096 9083+
a_2	3181 629-	3503 934-	9 3768+	4965 008+	5056 663+	7 4593+
a_3	233 253+	345 486+	4126-	99 240+	514 026+	370-
a_4	26 507+	6 855-	117+	67 431-	10 112+	710-
a_5	2 562-	100+		5 782-	4 328-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
March 21						
a_0	245.5750 767+	26.3633 628-	0.9434 7292+	2.0723 177+	0.6770 749+	1.0162 6085+
a_1	14.1082 517+	2.6485 866-	0.0111 4318+	13.2217 112+	7.2423 765+	0.0035 8874-
a_2	4799 862+	6616 030+	6 9120+	245 220-	424 561-	25 4912-
a_3	223 918-	509 933+	3219-	464 348+	772 569-	5120+
a_4	99 455-	12 281-	1041-	5 919-	7 855+	2909+
a_5	1 847+	6 645-		4 667-	2 149+	
March 22						
a_0	260.1311 619+	28.3012 457-	0.9552 6470+	15.3148 831+	7.8007 389+	1.0102 0327+
a_1	14.9622 028+	1.1806 342-	0.0123 8736+	13.3072 703+	6.9299 101+	0.0084 1692-
a_2	3549 909+	8005 438+	5 3141+	1065 626+	2673 676-	22 2433-
a_3	596 944-	394 988+	7426-	393 809+	719 637-	1 6945+
a_4	89 770-	47 316-	1294-	29 289-	18 453+	1815+
a_5	13 318+	5 615-		5 069-	2 188+	
March 23						
a_0	275.3810 162+	28.6471 304-	0.9680 9628+	28.7646 610+	14.3933 817+	0.9997 4961+
a_1	15.4638 562+	0.5172 214+	0.0131 7559+	13.6242 893+	6.1877 590+	0.0122 8465-
a_2	1354 407+	8850 223+	2 3090+	2020 455+	4700 014-	16 1131-
a_3	820 985-	152 226+	1 2698-	226 480+	623 786-	2 4194+
a_4	17 713-	76 316-	1332-	55 744-	29 287+	441+
a_5	16 758+	858-		4 285-	2 501+	
March 24						
a_0	290.8981 193+	27.2373 814-	0.9813 6248+	42.6076 409+	20.0519 396+	0.9860 9999+
a_1	15.4897 263+	2.3019 835+	0.0132 0310+	14.0718 892+	5.0735 856+	0.0147 6390-
a_2	1046 756-	8840 573+	2 2882-	2322 301+	6370 598-	8 6250-
a_3	729 128-	159 090-	1 8177-	36 768-	481 659-	2 5813+
a_4	69 536+	79 546-	979-	79 016-	42 118+	672-
a_5	7 795+	3 628+		156+	2 519+	
March 25						
a_0	306.2179 902+	24.0748 414-	0.9941 4521+	56.9001 974+	24.4447 632+	0.9707 2501+
a_1	15.0933 363+	3.9923 683+	0.0121 6090+	14.4937 990+	3.6730 731+	0.0157 4145-
a_2	2739 258-	7922 500+	8 3018-	1739 394+	7537 573-	1 3031-
a_3	379 103-	440 276-	2 2261-	347 112-	288 857-	2 2960+
a_4	106 602+	60 061-	115-	78 634-	55 475+	1281-
a_5	2 983-	4 776+		7 616+	1 066+	
March 26						
a_0	321.0098 523+	19.3397 792-	1.0052 5218+	71.5261 229+	27.3408 474+	0.9550 7005+
a_1	14.4728 981+	5.4231 481+	0.0098 2808+	14.7099 039+	2.1016 210+	0.0153 6455-
a_2	3267 218-	6289 111+	15 0093-	302 792+	8060 593-	4 8115+
a_3	14 908+	633 286-	2 2808-	583 087-	57 977-	1 7717+
a_4	88 773+	35 858-	1171+	37 873-	61 116+	1435-
a_5	7 236-	3 777+		12 019+	1 914-	
March 27						
a_0	335.1656 730+	13.3542 568-	1.0133 6297+	86.2054 120+	28.6365 317+	0.9403 4948+
a_1	13.8558 187+	6.4785 287+	0.0061 8886+	14.5863 927+	0.4955 963+	0.0139 2813-
a_2	2762 392-	4211 833+	21 1096-	1553 101-	7887 071-	9 2697+
a_3	297 915+	739 533-	1 8033-	616 285-	165 980+	1 1919+
a_4	51 460+	17 240-	2466+	25 199+	50 799+	1308-
a_5	6 549-	2 766+		8 570+	4 354-	
March 28						
a_0	348.7795 351+	6.5299 454-	1.0172 8520+	100.5782 431+	28.3646 634+	0.9274 5443+
a_1	13.4100 259+	7.0935 217+	0.0015 2472+	14.1052 435+	1.0138 815-	0.0117 6897-
a_2	1625 362-	1917 412+	25 0186-	3165 071-	7128 024-	12 0678+
a_3	439 089+	781 111-	7894-	433 951-	325 567+	6669+
a_4	18 895+	3 631-	3173+	68 028+	28 012+	1066-
a_5	5 055-	2 316+		1 111+	4 434-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
April 6						
a_0	114.3304 983+	26.6728 941+	0.9169 4826+	204.6316 201+	12.4505 307-	0.9181 4448+
a_1	13.3698 052+	2.3328 260-	0.0091 9800-	11.3524 470+	5.4186 803-	0.0065 9497+
a_2	4047 928-	6027 639-	13 4365+	3175 090+	1992 436+	4 1748+
a_3	153 545-	394 239+	2409+	372 680+	410 711+	3459-
a_4	71 689+	5 466+	811-	11 641-	17 431+	324+
a_5	3 759-	2 709-		4 192-	244-	
April 7						
a_0	127.2869 493+	23.7770 038+	0.9091 0990+	216.3372 608+	17.6271 775-	0.9251 2558+
a_1	12.5409 515+	3.4192 480-	0.0064 7086-	12.0925 146+	4.8901 312-	0.0073 3914+
a_2	4116 231-	4839 185-	13 6796+	4181 276+	3326 786+	3 3295+
a_3	95 144+	390 113+	824-	283 050+	476 973+	2131-
a_4	51 476+	7 882-	585-	33 136-	16 640+	258+
a_5	4 483-	787-		6 253-	2 015-	
April 8						
a_0	139.4304 913+	19.9119 817+	0.9039 9291+	228.8722 690+	22.1354 704-	0.9327 7893+
a_1	11.7645 986+	4.2735 959-	0.0037 8303-	12.9973 052+	4.0760 366-	0.0079 5142+
a_2	3566 847-	3723 957-	13 0877+	4768 760+	4837 412+	2 8397+
a_3	256 970+	351 444+	3152-	88 645+	521 960+	1070-
a_4	28 637+	11 482-	393-	66 531-	6 699+	95+
a_5	3 120-	465+		5 297-	4 515-	
April 9						
a_0	150.8666 538+	15.3000 329+	0.9014 8321+	242.3481 319+	25.6753 513-	0.9410 0457+
a_1	11.1382 164+	4.9173 135-	0.0012 7576-	13.9483 980+	2.9515 455-	0.0084 9107+
a_2	2655 317-	2733 822-	11 9117+	4582 121+	6398 217+	2 5679+
a_3	341 211+	310 508+	4718-	226 214-	502 724+	669-
a_4	13 116+	8 903-	224-	95 862-	16 735-	152-
a_5	1 573-	1 039+		2 028+	6 161-	
April 10						
a_0	161.7746 140+	10.1396 016+	0.9013 4919+	256.7227 372+	27.9390 924-	0.9497 4422+
a_1	10.7139 774+	5.3739 669-	0.0009 5606+	14.7596 389+	1.5308 577-	0.0089 7852+
a_2	1568 690-	1845 301-	10 3666+	3348 655+	7744 127+	2 2672+
a_3	378 538+	285 384+	5613-	583 471-	375 151+	1269-
a_4	5 475+	3 570-	68-	85 204-	49 207-	444-
a_5	588-	1 207+		12 725+	4 492-	
April 11						
a_0	172.3700 650+	4.6094 067+	0.9032 8511+	271.7516 468+	28.6633 922-	0.9589 3232+
a_1	10.5156 976+	5.6582 362-	0.0028 5830+	15.2266 133+	0.1085 896+	0.0093 7612+
a_2	406 073-	998 479-	8 6469+	1214 986+	8529 333+	1 6118+
a_3	394 738+	283 164+	5880-	795 334-	136 083+	3062-
a_4	2 780+	2 542+	81+	16 519-	72 277-	718-
a_5	290-	1 182+		15 860+	305+	
April 12						
a_0	182.8848 780+	1.1199 886-	0.9069 5011+	287.0201 595+	27.6954 583-	0.9684 3181+
a_1	10.5538 709+	5.7713 752-	0.0044 1451+	15.2323 239+	1.8265 268+	0.0095 7786+
a_2	791 954+	121 898-	6 9354+	1111 074-	8507 143+	2571+
a_3	402 687+	305 068+	5549-	707 337-	147 793-	5986-
a_4	1 605+	8 534+	211+	65 979+	69 494-	887-
a_5	727-	1 031+		7 544+	4 180+	
April 13						
a_0	193.5583 008+	6.8720 902-	0.9120 0478+	302.0779 945+	25.0395 279-	0.9779 6665+
a_1	10.8333 451+	5.7003 057-	0.0056 4357+	14.8280 603+	3.4579 102+	0.0094 1416+
a_2	2002 418+	854 850+	5 4000+	2762 024-	7688 800+	2 0696-
a_3	401 057+	349 296+	4688-	373 646-	383 769-	9622-
a_4	1 704-	13 855+	301+	101 970+	47 193-	842-
a_5	2 030-	652+		2 516-	4 426+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
April 22						
a_0	316.6024 331+	20.8553 914-	0.9870 6921+	65.4806 258+	26.2662 063+	0.9684 2536+
a_1	14.2030 870+	4.8638 729+	0.0086 7783+	14.9297 746+	2.7946 771+	0.0135 9489-
a_2	3296 708-	6298 632+	5 4503-	1385 596+	8143 994-	4 4381-
a_3	6 645+	529 336-	1 3101-	608 243-	221 269-	2 0506+
a_4	86 647+	24 779-	484-	72 366-	72 906+	483-
a_5	6 558-	2 503+		13 903+	18+	
April 23						
a_0	330.4845 228+	15.4168 164-	0.9950 6616+	80.4822 896+	28.2316 493+	0.9545 8688+
a_1	13.5771 195+	5.9561 370+	0.0071 7530+	15.0024 257+	1.1286 634+	0.0138 8672-
a_2	2822 639-	4586 919+	9 6499-	733 621-	8370 272-	1 4099-
a_3	287 927+	604 369-	1 5135-	758 861-	67 893+	1 8469+
a_4	52 752+	12 710-	207+	1 970+	72 431+	924-
a_5	5 905-	836+		13 565+	4 700-	
April 24						
a_0	343.8128 558+	9.0636 118-	1.0011 2720+	95.3370 206+	28.5368 479+	0.9410 1660+
a_1	13.1171 198+	6.6875 437+	0.0047 9954+	14.6356 034+	0.4984 025-	0.0130 8765-
a_2	1701 380-	2705 830+	14 0388-	2862 508-	7779 246-	6 3917+
a_3	440 690+	647 131-	1 4330-	620 377-	309 627+	1 4696+
a_4	23 412+	9 062-	1097+	71 413+	47 260+	1074-
a_5	4 429-	372+		4 371+	6 401-	
April 25						
a_0	356.8058 050+	2.1710 671-	1.0043 9053+	109.6319 138+	27.2955 694+	0.9287 0434+
a_1	12.9162 017+	7.0311 325+	0.0016 0581+	13.9077 302+	1.9456 582-	0.0114 1141-
a_2	283 051-	713 728+	17 6554-	4251 781-	6630 957-	10 1574+
a_3	490 185+	679 336-	9848-	295 641-	435 615+	1 0359+
a_4	1 845+	7 572-	1883+	91 022+	14 279+	1033-
a_5	4 184-	944+		3 765-	4 622-	
April 26						
a_0	9.7424 862+	4.8628 419+	1.0041 5115+	123.0936 275+	24.7313 427+	0.9184 0192+
a_1	13.0052 918+	6.9675 219+	0.0021 4529-	13.0032 054+	3.1377 611-	0.0091 1052-
a_2	1156 768+	1360 312-	19 4696-	4630 565-	5284 640-	12 6488+
a_3	455 104+	699 480-	2128-	29 442+	448 114+	6211+
a_4	18 770-	3 088-	2220+	69 892+	8 733-	907-
a_5	5 314-	2 161+		5 953-	1 799-	
April 27						
a_0	22.9065 568+	11.6242 920+	1.0000 5982+	135.6431 144+	21.1088 758+	0.9106 0932+
a_1	13.3630 107+	6.4854 630+	0.0060 1413-	12.1109 066+	4.0646 454-	0.0064 3073-
a_2	2356 199+	3455 678-	18 7843-	4182 549-	4010 617-	13 9720+
a_3	326 447+	689 328-	6948+	250 288+	396 383+	2584+
a_4	46 075-	7 642+	1941+	39 309+	17 253-	766-
a_5	6 214-	3 708+		4 434-	251+	
April 28						
a_0	36.5326 032+	17.6963 893+	0.9922 5615+	147.3642 825+	16.6811 069+	0.9055 9396+
a_1	13.9106 508+	5.5924 409+	0.0094 8484-	11.3629 922+	4.7546 281-	0.0035 8947-
a_2	2996 603+	5440 675-	15 5584-	3240 172-	2922 413-	14 2913+
a_3	81 666+	621 057-	1 4821+	364 409+	330 485+	473-
a_4	79 448-	26 585+	1179+	17 213+	15 618-	642-
a_5	3 511-	4 852+		2 282-	1 264+	
April 29						
a_0	50.7427 849+	22.6858 007+	0.9813 7546+	158.4411 914+	11.6658 507+	0.9034 2247+
a_1	14.5009 460+	4.3310 476+	0.0121 0475-	10.8300 260+	5.2455 796-	0.0007 7106-
a_2	2729 495+	7095 651-	10 4329-	2066 457-	2011 986-	13 7678+
a_3	266 419-	466 758-	1 9527+	411 296+	280 877+	3035-
a_4	99 091-	52 025+	266+	6 100+	9 090-	537-
a_5	4 964+	3 963+		810-	1 627+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
May 8						
a_0	169 ^o .1062 303+	6 ^o .2464 138+	0 ^o .9039 9249+	268 ^o .0806 930+	28 ^o .5174 778-	0 ^o .9615 4871+
a_1	10.5421 591+	5.5665 363-	0.0018 7000+	15.3536 550+	0.2790 741-	0.0077 3077+
a_2	804 034-	1207 604-	12 5386+	1513 396+	8623 541+	3 7573-
a_3	427 949+	260 826+	5183-	877 100-	175 377+	2119-
a_4	2 345+	846-	436-	32 504-	82 749-	290+
a_5	219-	1 689+		18 860+	221+	
May 9						
a_0	179.6109 935+	0.5852 840+	0.9070 6015+	283.4966 132+	27.9249 130-	0.9688 8546+
a_1	10.5105 654+	5.7293 033-	0.0042 0476+	15.3896 225+	1.4652 639+	0.0069 2733+
a_2	491 735+	413 292-	10 7256+	1123 682-	8655 607+	4 2274-
a_3	434 981+	274 266+	6937-	823 341-	150 333-	944-
a_4	1 567+	7 700+	318-	66 388+	80 078-	26+
a_5	494-	1 578+		9 910+	5 703+	
May 10						
a_0	190.2143 378+	5.1569 940-	0.9122 6493+	298.6991 633+	25.6165 591-	0.9753 8086+
a_1	10.7397 850+	5.7258 133-	0.0061 2907+	14.9493 803+	3.1221 064+	0.0060 5455+
a_2	1801 190+	471 519+	8 4588+	3096 540-	7781 458+	4 5033-
a_3	435 553+	320 618+	8221-	465 594-	413 218-	853-
a_4	500-	15 777+	163-	114 106+	49 539-	243-
a_5	1 756-	1 189+		2 462-	6 268+	
May 11						
a_0	201.1775 715+	10.8018 971-	0.9191 5604+	313.3034 945+	21.7619 557-	0.9809 7411+
a_1	11.2296 083+	5.5284 203-	0.0075 6768+	14.2347 994+	4.5377 482+	0.0051 1854+
a_2	3087 329+	1539 980+	5 9008+	3833 818-	6307 334+	4 9107-
a_3	414 587+	395 024+	8883-	36 819-	550 205-	1871-
a_4	8 917-	22 093+	30+	98 320+	17 631-	422-
a_5	4 128-	180+		7 542-	3 510+	
May 12						
a_0	212.7560 669+	16.1345 897-	0.9272 2528+	327.1603 079+	16.6499 068-	0.9855 7864+
a_1	11.9658 167+	5.0929 926-	0.0084 8257+	13.4925 476+	5.6288 530+	0.0040 6334+
a_2	4236 254+	2859 489+	3 2605+	3430 003-	4585 968+	5 7255-
a_3	336 064+	483 979+	8761-	281 496+	587 228-	3626-
a_4	29 847-	23 533+	239+	59 158+	534-	428-
a_5	6 893-	1 915-		6 536-	709+	
May 13						
a_0	225.1754 413+	20.8910 737-	0.9359 4867+	340.3432 671+	10.6211 622-	0.9890 2889+
a_1	12.8985 018+	4.3674 491-	0.0088 8139+	12.9113 937+	6.3700 176+	0.0027 9230+
a_2	4996 110+	4433 516+	7808+	2295 911-	2828 074+	7 0635-
a_3	147 789+	557 165+	7787-	454 026+	583 120-	5408-
a_4	66 439-	14 239+	416+	26 638+	2 378+	217-
a_5	6 996-	5 080-		4 287-	735-	
May 14						
a_0	238.5809 894+	24.7585 388-	0.9448 3444+	353.0727 074+	4.0264 849-	0.9910 5860+
a_1	13.9119 952+	3.3104 432-	0.0088 2062+	12.5969 319+	6.7612 799+	0.0012 0867+
a_2	4970 345+	6139 516+	1 3027-	816 787-	1085 550+	8 8036-
a_3	183 729-	561 995+	6084-	518 237+	581 020-	6325-
a_4	105 089-	12 082-	506+	5 879+	1 817-	184+
a_5	224+	7 541-		3 371-	832-	
May 15						
a_0	252.9611 597+	27.4007 933-	0.9534 6900+	5.6400 353+	2.7849 830+	0.9913 2552+
a_1	14.8090 362+	1.9225 431-	0.0083 9781+	12.5897 113+	6.8029 421+	0.0007 3441-
a_2	3790 805+	7677 281+	2 8258-	739 576+	676 803-	10 5754-
a_3	594 660-	439 228+	4016-	507 538+	596 029-	5589-
a_4	104 375-	51 992-	465+	10 359-	6 418-	670+
a_5	13 199+	5 932-		4 278-	165+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
May 24						
a_0	18.3529 943+	9.4600 165+	0.9894 8438+	131.3138 823+	22.2798 206+	0.9174 3032+
a_1	12.8836 034+	6.4862 899+	0.0029 9033-	12.5487 560+	3.8288 514-	0.0080 9110-
a_2	2157 237+	2501 817-	11 8379-	4659 398-	4459 286-	10 5885+
a_3	422 284+	618 928-	2855-	166 737+	457 156+	8604+
a_4	31 799-	5 981-	1071+	57 770+	16 740-	731-
a_5	6 159-	2 118+		5 947-	888-	
May 25						
a_0	31.4907 540+	15.6338 456+	0.9852 9243+	143.4185 546+	18.0489 934+	0.9104 7680+
a_1	13.4259 372+	5.7989 176+	0.0054 0065-	11.6870 349+	4.5906 999-	0.0057 4451-
a_2	3171 458+	4373 314-	12 0466-	3872 078-	3197 064-	12 7314+
a_3	233 542+	620 265-	1526+	339 716+	382 338+	5671+
a_4	64 214-	4 573+	1231+	27 805+	20 670-	723-
a_5	6 279-	4 595+		3 507-	855+	
May 26						
a_0	45.2501 418+	20.9343 222+	0.9787 1469+	154.7547 831+	13.1748 393+	0.9060 5492+
a_1	14.1014 730+	4.7423 037+	0.0077 1490-	11.0239 051+	5.1232 510-	0.0030 5701-
a_2	3423 560+	6160 585-	10 8547-	2721 135-	2165 474-	13 9996+
a_3	82 733-	555 279-	6547+	417 070+	308 665+	2780+
a_4	98 669-	28 476+	1084+	10 570+	16 081-	704-
a_5	532-	5 996+		1 421-	1 624+	
May 27						
a_0	59.6757 773+	25.0084 868+	0.9699 9062+	165.5491 967+	7.8644 617+	0.9044 1864+
a_1	14.7216 434+	3.3579 892+	0.0096 4605-	10.6083 182+	5.4693 664-	0.0002 0182-
a_2	2577 897+	7595 347-	8 2523-	1420 667-	1319 699-	14 4119+
a_3	476 532-	382 677-	1 0940+	445 793+	260 754+	29-
a_4	102 167-	60 238+	692+	3 815+	7 816-	695-
a_5	10 596+	3 850+		311-	1 908+	
May 28						
a_0	74.5984 001+	27.5750 824+	0.9596 3567+	176.0603 778+	2.2886 099+	0.9056 5077+
a_1	15.0587 013+	1.7501 306+	0.0109 4061-	10.4592 931+	5.6572 525-	0.0026 5189+
a_2	641 897+	8343 344-	4 5699-	63 471-	565 239-	13 9862+
a_3	775 818-	106 382-	1 3714+	458 021+	248 620+	2807-
a_4	44 672-	80 233+	205+	2 592+	1 808+	698-
a_5	16 900+	1 790-		165-	1 995+	
May 29						
a_0	89.6409 321+	28.4880 847+	0.9483 7725+	186.5593 685+	3.3999 243-	0.9096 6623+
a_1	14.9449 093+	0.0807 401+	0.0114 3500-	10.5849 583+	5.6939 941-	0.0053 3698+
a_2	1783 955-	8199 205-	3463-	1324 546+	211 439+	12 7254+
a_3	788 907-	194 023+	1 4499+	466 205+	275 732+	5608-
a_4	44 348+	69 806+	231-	2 185+	11 924+	692-
a_5	10 613+	6 465-		1 055-	1 890+	
May 30						
a_0	104.3340 513+	27.7746 408+	0.9370 5030+	197.3235 150+	9.0438 198-	0.9162 1276+
a_1	14.3744 797+	1.4762 041-	0.0110 7855-	10.9900 731+	5.5632 729-	0.0076 8615+
a_2	3778 573-	7263 211-	3 8556+	2725 789+	1129 131+	10 6299+
a_3	511 584-	408 436+	1 3527+	463 089+	341 957+	8397-
a_4	96 603+	35 637+	530-	2 557-	21 713+	636-
a_5	540-	6 650-		3 259-	1 274+	
May 31						
a_0	118.2891 217+	25.6158 578+	0.9264 8727+	208.6318 943+	14.4576 853-	0.9248 7156+
a_1	13.5036 548+	2.7953 827-	0.0099 2285-	11.6715 016+	5.2255 396-	0.0095 3473+
a_2	4739 558-	5890 661-	7 5908+	4067 150+	2298 121+	7 7337+
a_3	133 925-	486 061+	1 1365+	418 303+	440 506+	1 0980-
a_4	90 804+	1 854+	684-	18 614-	28 739+	486-
a_5	6 263-	3 799-		6 684-	500-	

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 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
June 9						
a_0	220.7494 115+	19.4065 382-	0.9350 6500+	337.3449 384+	11.8175 880-	0.9905 4327+
a_1	12.5996 328+	4.6225 219-	0.0107 3261+	13.0790 250+	6.2713 114+	0.0005 2001-
a_2	5143 326+	3787 186+	4 1569+	3141 873-	2930 849+	8 6881-
a_3	275 714+	548 433+	1 2966-	439 727+	629 531-	5285+
a_4	53 404-	26 979+	206-	35 414+	13 822+	192-
a_5	9 155-	4 015-		5 324-	338-	
June 10						
a_0	233.8846 923+	23.5932 019-	0.9460 8158+	350.1567 579+	5.3147 965-	0.9892 0537+
a_1	13.6850 783+	3.6917 755-	0.0111 6675+	12.5940 746+	6.6739 804+	0.0021 0679-
a_2	5557 882+	5554 169+	1556+	1663 353-	1121 712+	7 2236-
a_3	26 844-	613 809+	1 3822-	529 297+	578 238-	4452+
a_4	103 333-	6 640+	192+	9 505+	11 520+	385-
a_5	4 934-	8 296-		3 316-	1 373-	
June 11						
a_0	248.1120 476+	26.6683 452-	0.9571 2760+	2.6380 457+	1.4145 459+	0.9864 1689+
a_1	14.7448 172+	2.3982 918-	0.0107 9090+	12.4223 367+	6.7287 729+	0.0034 3340-
a_2	4807 542+	7352 127+	3 8622-	51 502-	557 694-	6 1187-
a_3	481 461-	556 979+	1 3050-	534 150+	545 765-	2847+
a_4	131 279-	37 266-	633+	6 340-	4 163+	372-
a_5	9 405+	9 257-		3 332-	1 148-	
June 12						
a_0	263.2772 854+	28.2803 787-	0.9674 0811+	15.1076 799+	8.0332 744+	0.9823 9637+
a_1	15.5140 916+	0.7803 009-	0.0096 5230+	12.5680 775+	6.4545 973+	0.0045 8663-
a_2	2670 221+	8706 517+	7 3864-	1479 627+	2181 566-	5 4821-
a_3	905 683-	318 704+	1 0466-	474 584+	539 824-	1316+
a_4	79 361-	86 231-	987+	22 656-	2 051-	189-
a_5	22 132+	3 302-		4 905-	180+	
June 13						
a_0	278.9621 081+	28.1671 108-	0.9762 2698+	27.8684 224+	14.2155 456+	0.9772 7281+
a_1	15.7557 466+	1.0204 799+	0.0079 0058+	12.9948 620+	5.8556 093+	0.0056 5113-
a_2	300 550-	9112 336+	9 9296-	2718 270+	3811 598-	5 1922-
a_3	1004 645-	54 464-	6431-	334 202+	544 889-	549+
a_4	39 264+	101 958-	1123+	47 941-	1 510-	84+
a_5	16 810+	5 294+		6 261-	2 508+	
June 14						
a_0	294.5929 426+	26.2505 100-	0.9830 8152+	41.1631 114+	19.6356 059+	0.9711 0880+
a_1	15.4183 359+	2.7884 755+	0.0057 6670+	13.6164 726+	4.9304 755+	0.0066 6974-
a_2	2910 804-	8390 553+	11 1893-	3370 251+	5430 210-	4 9692-
a_3	688 295-	407 376-	1852-	81 348+	524 464-	903+
a_4	123 295+	72 548-	983+	81 707-	11 295+	346+
a_5	748+	8 669+		3 836-	4 980+	
June 15						
a_0	309.6637 728+	22.6701 047-	0.9877 2060+	55.1161 895+	23.9722 415+	0.9639 5464+
a_1	14.6793 680+	4.3196 861+	0.0035 1262+	14.2803 359+	3.6941 022+	0.0076 2261-
a_2	4229 113-	6820 044+	11 1664-	3085 347+	6885 840-	4 4854-
a_3	192 981-	612 174-	2130+	278 835-	429 331-	2330+
a_4	122 392+	27 711-	621+	103 258-	37 586+	513+
a_5	8 457-	6 202+		4 899+	5 349+	
June 16						
a_0	323.9123 249+	17.7317 824-	0.9901 4408+	69.6673 407+	26.9391 202+	0.9559 1192+
a_1	13.8203 791+	5.4920 550+	0.0013 6808+	14.7749 115+	2.2058 399+	0.0084 2925-
a_2	4158 664-	4879 241+	10 1683-	1678 548+	7894 598-	3 4780-
a_3	211 886+	663 207-	4615+	637 572-	227 549-	4429+
a_4	77 514+	3 064+	179+	76 858-	65 915+	537+
a_5	8 391-	2 295+		14 538+	1 728+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
June 25			July 3			
a_0	84.5401 179+	28.3395 098+	0.9471 8453+	182.9455 478+	1.7350 248-	0.9054 5566+
a_1	14.8958 751+	0.5858 798+	0.0089 7048-	10.4457 528+	5.6583 000-	0.0032 4435+
a_2	549 204-	8164 502-	1 8306-	658 054+	97 903+	14 2343+
a_3	799 682-	50 316+	6614+	464 817+	250 555+	341+
a_4	1 033+	74 335+	425+	3 874+	4 420+	751-
a_5	14 419+	3 791-		398-	2 069+	
June 26			July 4			
a_0	99.3026 496+	28.1210 254+	0.9381 0138+	193.5039 354+	7.3578 301-	0.9101 1934+
a_1	14.5537 412+	1.0040 905-	0.0091 2117-	10.7181 578+	5.5607 504-	0.0060 7140+
a_2	2797 616-	7605 714-	4024+	2071 841+	896 816+	13 8824+
a_3	656 706-	308 152+	8331+	475 446+	288 845+	2660-
a_4	74 924+	53 593+	225+	2 392+	14 971+	872-
a_5	4 657+	6 558-		1 907-	1 945+	
June 27			July 5			
a_0	113.5189 167+	26.3918 821+	0.9291 0600+	204.4768 704+	12.7983 229-	0.9175 4366+
a_1	13.8294 948+	2.4146 285-	0.0087 8177-	11.2751 596+	5.2877 743-	0.0087 3318+
a_2	4271 970-	6425 466-	3 0297+	3493 533+	1872 700+	12 5578+
a_3	315 355-	457 589+	9230+	464 189+	367 632+	6162-
a_4	95 789+	19 555+	0+	6 582-	25 195+	978-
a_5	4 009-	5 303-		4 930-	1 048+	
June 28			July 6			
a_0	126.8988 570+	23.3818 911+	0.9207 1950+	216.1466 510+	17.8594 398-	0.9274 6122+
a_1	12.9168 024+	3.5572 713-	0.0078 9893-	12.1080 211+	4.7923 460-	0.0110 2075+
a_2	4683 759-	4988 408-	5 7926+	4797 263+	3137 371+	10 1219+
a_3	26 321+	484 376+	9217+	386 419+	477 391+	1 0113-
a_4	73 274+	7 014-	200-	31 447-	31 300+	1003-
a_5	6 270-	2 458-		8 743-	1 496-	
June 29			July 7			
a_0	139.3566 160+	19.3732 695+	0.9134 9000+	228.7690 213+	22.2873 291-	0.9393 8300+
a_1	12.0141 232+	4.4136 720-	0.0064 7190-	13.1664 492+	4.0098 877-	0.0127 0157+
a_2	4227 988-	3601 877-	8 4330+	5679 985+	4742 482+	6 4908+
a_3	257 624+	433 059+	8402+	173 117+	585 017+	1 4198-
a_4	41 079+	18 858-	353-	77 990-	24 497+	855-
a_5	4 592-	173-		9 234-	6 067-	
June 30			July 8			
a_0	150.9773 516+	14.6408 127+	0.9079 4189+	242.5120 582+	25.7626 240-	0.9525 8312+
a_1	11.2599 511+	5.0117 578-	0.0045 4736-	14.3185 792+	2.8791 255-	0.0135 3954+
a_2	3254 554-	2417 516-	10 7383+	5638 302+	6583 677+	1 7312+
a_3	377 354+	356 635+	6979+	225 485-	620 033+	1 7711-
a_4	18 219+	19 328-	464-	129 347-	6 978-	446-
a_5	2 281-	1 083+		491+	10 289-	
July 1			July 9			
a_0	161.9511 764+	9.4211 423+	0.9045 3351+	257.3590 337+	27.9231 052-	0.9661 1422+
a_1	10.7283 952+	5.3954 594-	0.0022 0891-	15.3271 204+	1.3843 137-	0.0133 3658+
a_2	2035 951-	1452 712-	12 5505+	4190 673+	8298 536+	3 8285-
a_3	428 342+	290 495+	5118+	728 339-	490 270+	1 9573-
a_4	7 142+	13 699-	553-	126 969-	61 823-	239+
a_5	712-	1 657+		17 991+	8 629-	
July 2			July 10			
a_0	172.5194 538+	3.9082 569+	0.9036 2530+	273.0214 898+	28.4355 835-	0.9788 7462+
a_1	10.4522 094+	5.6035 039-	0.0004 3260+	15.9049 675+	0.3934 409+	0.0119 9325+
a_2	715 150-	646 828-	13 7511+	1425 003+	9311 867+	9 5314-
a_3	450 168+	252 435+	2909+	1053 288-	161 588+	1 8627-
a_4	3 908+	5 317-	644-	28 136-	106 755-	1070+
a_5	79-	1 931+		23 679+	196+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
July 11						
a_0	288-9631 833+	27-1054 529-	0-9897 3917+	38-0188 611+	18-6915 972+	0-9703 5050+
a_1	15-8745 517+	2-2616 958+	0-0095 7102+	13-3827 885+	5-1088 923+	0-0092 0966-
a_2	1666 141-	9158 393+	14 4560-	2829 197+	5211 227-	5660-
a_3	936 622-	258 990-	1 4254-	167 999+	469 737-	5835+
a_4	95 465+	103 451-	1772+	67 055-	10 276+	652-
a_5	9 581+	8 173+		4 251-	3 069+	
July 12						
a_0	304-5879 632+	23-9633 446-	0-9977 3977+	51-6942 385+	23-2337 277+	0-9611 3607+
a_1	15-3032 962+	3-9783 845+	0-0063 2318+	13-9700 868+	3-9313 722+	0-0091 7392-
a_2	3807 949-	7842 850+	17 6605-	2888 020+	6527 977-	8009+
a_3	467 570-	590 428-	6994-	139 270-	397 242-	3206+
a_4	139 571+	59 765-	2048+	90 567-	26 426+	395-
a_5	5 784-	9 070+		1 726+	4 367+	
July 13						
a_0	319-4770 863+	19-2647 874-	1-0022 4743+	65-9303 162+	26-4756 574+	0-9520 7035+
a_1	14-4543 666+	5-3504 513+	0-0026 6326+	14-4705 558+	2-5193 565+	0-0089 3337-
a_2	4431 723-	5803 786+	18 5384-	1944 098+	7517 275-	1 5342+
a_3	30 282+	740 762-	1369+	479 395-	248 798-	1632+
a_4	106 238+	13 675-	1772+	81 682-	49 655+	118-
a_5	9 987-	5 459+		10 532+	2 769+	
July 14						
a_0	333-5009 338+	13-4088 553-	1-0030 8825+	80-5402 274+	28-2236 490+	0-9433 0554+
a_1	13-6146 106+	6-2862 352+	0-0009 3243-	14-6881 540+	0-9625 037+	0-0085 8226-
a_2	3803 511-	3553 963+	17 0860-	121 691+	7937 984-	1 9603+
a_3	356 737+	743 021-	8546+	699 059-	24 838-	1183+
a_4	55 090+	13 114+	1076+	25 136-	63 995+	114+
a_5	7 403-	1 704+		13 757+	1 418-	
July 15						
a_0	346-7756 357+	6-8400 441-	1-0005 4344+	95-1695 068+	28-3961 281+	0-9349 3228+
a_1	12-9792 670+	6-7802 165+	0-0040 5020-	14-4995 919+	0-6076 594-	0-0081 5013-
a_2	2476 732-	1420 521+	13 9013-	1988 325-	7642 858-	2 3881+
a_3	504 775+	674 838-	1 2839+	665 427-	215 031+	1669+
a_4	18 595+	20 950+	263+	46 551+	55 851+	261+
a_5	4 398-	549-		7 571+	4 842-	
July 16						
a_0	359-5591 266+	0-0167 808+	0-9952 3413+	109-4091 357+	27-0507 868+	0-9270 4026+
a_1	12-6405 931+	6-8699 741+	0-0064 3482-	13-9246 954+	2-0518 029-	0-0076 1199-
a_2	894 716-	483 871-	9 9121-	3629 741-	6711 265-	3 0469+
a_3	535 806+	596 977-	1 3807+	408 356-	389 814+	2743+
a_4	2 599-	17 622+	389-	83 382+	30 359+	311+
a_5	3 307-	1 306-		1 047-	5 119-	
July 17						
a_0	12-1632 382+	6-7803 017+	0-9879 4227+	122-9382 549+	24-3693 628+	0-9197 6351+
a_1	12-6196 981+	6-6005 031+	0-0080 1866-	13-1090 651+	3-2675 254-	0-0069 0786-
a_2	664 102+	2182 212-	6 0146-	4365 332-	5410 916-	4 0552+
a_3	491 942+	539 256-	1 2149+	87 718-	461 119+	4011+
a_4	18 644-	10 572+	743-	75 802+	4 342+	273+
a_5	4 035-	795-		5 142-	3 214-	
July 18						
a_0	24-8962 728+	13-1096 357+	0-9794 3620+	135-6090 810+	20-6069 705+	0-9133 0401+
a_1	12-8906 245+	6-0061 170+	0-0088 8687-	12-2374 332+	4-2112 408-	0-0059 6554-
a_2	1987 653+	3744 568-	2 8176-	4225 294-	4033 614-	5 4195+
a_3	376 369+	503 980-	9095+	164 193+	447 559+	5120+
a_4	39 131-	6 158+	802-	48 813+	11 508-	174+
a_5	5 252-	834+		4 777-	1 102-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
July 27						
a_0	147-4448 077+	16-0358 632+	0-9079 3337+	237-1703 860+	24-7774 984-	0-9395 8915+
a_1	11-4587 712+	4-8888 483-	0-0047 2108-	13-6288 099+	3-2586 119-	0-0136 7629+
a_2	3487 645-	2770 950-	7 0556+	5641 568+	5679 765+	9 0670+
a_3	312 760+	391 338+	5821+	11 735+	574 949+	1 1950-
a_4	24 731+	16 678-	40+	96 504-	13 257+	1351-
a_5	2 850-	317+		5 617-	7 318-	
July 28						
a_0	158-5882 785+	10-9074 175+	0-9039 7645+	251-3543 142+	27-4100 449-	0-9540 3913+
a_1	10-8635 395+	5-3321 488-	0-0031 3374-	14-7192 492+	1-9485 327-	0-0150 7709+
a_2	2429 458-	1693 796-	8 8213+	5041 071+	7410 701+	4 6769+
a_3	384 148+	328 253+	5982+	422 944-	553 526+	1 7468-
a_4	10 700+	14 862-	106-	128 163-	25 240-	1181-
a_5	1 176-	1 083+		7 670+	9 752-	
July 29						
a_0	169-2482 394+	5-4373 366+	0-9017 8360+	266-5233 268+	28-5656 542-	0-9693 9742+
a_1	10-4965 851+	5-5778 347-	0-0011 9427-	15-5531 646+	0-3153 024-	0-0154 4108+
a_2	1224 547-	787 354-	10 5475+	3080 518+	8821 896+	1 2539-
a_3	415 708+	279 884+	5558+	851 665-	357 340+	2 2346-
a_4	5 092+	9 328-	257-	85 874-	76 929-	590-
a_5	261-	1 490+		21 056+	5 734-	
July 30						
a_0	179-6644 238+	0-1920 289-	0-9016 9709+	282-2928 950+	27-9712 994-	0-9844 8376+
a_1	10-3782 949+	5-6543 261-	0-0010 7171+	15-8899 433+	1-5226 491+	0-0144 9624+
a_2	50 557+	11 247+	12 0560+	221 973+	9374 958+	8 2796-
a_3	433 522+	257 625+	4536+	986 400-	3 073-	2 4835-
a_4	4 066+	1 805-	416-	27 456+	105 847-	454+
a_5	150-	1 743+		17 692+	2 632+	
July 31						
a_0	190-0915 181+	5-8194 740-	0-9040 1561+	298-1109 104+	25-5217 832-	0-9979 0824+
a_1	10-5200 133+	5-5746 394-	0-0036 0237+	15-6582 293+	3-3557 021+	0-0121 1343+
a_2	1374 066+	790 746+	13 1618+	2395 446-	8757 318+	15 4187-
a_3	447 799+	267 900+	2883+	708 155-	397 121-	2 3023-
a_4	3 686+	7 026+	595-	116 782+	90 294-	1722+
a_5	967-	1 857+		2 156+	7 889+	
August 1						
a_0	200-7939 898+	11-2873 605-	0-9089 5703+	313-4706 733+	21-3383 018-	1-0082 6679+
a_1	10-9301 545+	5-3323 815-	0-0062 9742+	15-0144 726+	4-9558 562+	0-0084 0796+
a_2	2729 971+	1655 221+	13 6630+	3798 304-	7103 337+	21 2621-
a_3	451 673+	314 395+	512+	225 336-	679 484-	1 5960-
a_4	648-	16 597+	805-	123 141+	49 079-	2722+
a_5	3 014-	1 572+		8 003-	7 575+	
August 2						
a_0	212-0419 425+	16-4209 634-	0-9166 1782+	328-0942 956+	15-7442 108-	1-0144 1616+
a_1	11-6098 804+	4-8995 954-	0-0090 1318+	14-2324 644+	6-1568 309+	0-0037 8577+
a_2	4050 987+	2713 804+	13 3264+	3815 917-	4846 199+	24 4096-
a_3	417 062+	395 724+	2705-	186 568+	801 647-	4780-
a_4	15 434-	25 064+	1039-	80 308+	10 910-	2965+
a_5	6 290-	266+		8 809-	4 720+	
August 3						
a_0	224-0964 554+	21-0070 731-	0-9269 2620+	341-9709 750+	9-1835 436-	1-0157 4283+
a_1	12-5358 751+	4-2279 627-	0-0115 5575+	13-5529 730+	6-8835 695+	0-0011 2080-
a_2	5146 487+	4054 139+	11 8851+	2862 508-	2422 945+	24 0840-
a_3	291 017+	496 835+	6878-	421 185+	799 676-	7332+
a_4	48 017-	27 227+	1253-	35 978+	12 356+	2325+
a_5	8 930-	2 826-		6 129-	1 964+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
August 12						
a_0	355.2828 007+	2.1362 153-	1.0123 1019+	106.0127 226+	27.6019 122+	0.9258 9274+
a_1	13.1181 559+	7.1341 778+	0.0056 2460-	13.9556 621+	1.7336 497-	0.0083 6630-
a_2	1444 288-	117 613+	20 5258-	3332 592-	6846 678-	6 7917+
a_3	504 885+	731 652-	1 6719+	412 550-	348 658+	617-
a_4	5 972+	21 684+	1140+	71 977+	30 158+	77-
a_5	4 266-	175+		218+	4 316-	
August 13						
a_0	8.3071 869+	4.9387 444+	1.0048 1158+	119.6010 901+	25.2210 445+	0.9181 9868+
a_1	12.9810 197+	6.9469 650+	0.0091 8266-	13.1942 738+	2.9884 814-	0.0070 2952-
a_2	63 607+	1945 576-	14 8631-	4136 490-	5662 977-	6 5670+
a_3	486 210+	643 505-	2 1203+	125 018-	426 895+	900-
a_4	14 811-	22 009+	54-	71 094+	8 161+	129+
a_5	4 151-	413-		4 162-	2 929-	
August 14						
a_0	21.3412 920+	11.6289 609+	0.9943 5408+	132.3759 062+	21.7094 781+	0.9118 1815+
a_1	13.1316 035+	6.3733 960+	0.0115 2146-	12.3558 265+	3.9912 065-	0.0057 3796-
a_2	1391 828+	3748 250-	8 5605-	4126 798-	4362 595-	6 3782+
a_3	385 144+	559 218-	2 0835+	117 482+	431 230+	360-
a_4	35 706-	19 428+	875-	48 987+	6 352-	257+
a_5	4 788-	259+		4 456-	1 217-	
August 15						
a_0	34.6465 433+	17.5735 787+	0.9821 7617+	144.3352 541+	17.3243 782+	0.9067 1697+
a_1	13.5088 370+	5.4638 828+	0.0126 4360-	11.5830 797+	4.7375 046-	0.0044 6285-
a_2	2284 942+	5306 781-	2 8464-	3525 053-	3119 147-	6 4256+
a_3	195 057+	478 053-	1 7191+	269 677+	394 359+	691+
a_4	60 941-	20 527+	1227-	26 380+	12 166-	306+
a_5	3 859-	1 796+		2 942-	14-	
August 16						
a_0	48.3969 001+	22.4612 104+	0.9694 0757+	155.5951 400+	12.3131 768+	0.9029 0664+
a_1	13.9980 420+	4.2682 208+	0.0127 4626-	10.9680 550+	5.2478 991-	0.0031 4478-
a_2	2465 591+	6599 744-	1 5754+	2587 157-	2009 175-	6 8155+
a_3	84 443-	377 367-	1 2192+	346 634+	345 954+	1935+
a_4	82 126-	30 013+	1208-	11 788+	12 034-	282+
a_5	1 061+	2 933+		1 396-	646+	
August 17						
a_0	62.6249 504+	26.0350 147+	0.9569 2868+	166.3401 819+	6.8978 168+	0.9004 6558+
a_1	14.4335 159+	2.8485 327+	0.0121 1377-	10.5586 324+	5.5504 382-	0.0017 1232-
a_2	1730 098+	7522 283-	4 5153+	1490 461-	1037 039-	7 5630+
a_3	398 105-	228 528-	7316+	380 369+	304 490+	3082+
a_4	76 890-	45 727+	977-	5 015+	8 694-	199+
a_5	8 647+	2 009+		447-	998+	
August 18						
a_0	77.1848 413+	28.1132 399+	0.9453 2984+	176.7882 619+	1.2733 541+	0.8995 4237+
a_1	14.6336 752+	1.2948 096+	0.0110 3031-	10.3764 338+	5.6694 771-	0.0000 9930-
a_2	161 331+	7913 344-	6 1337+	323 708-	165 735-	8 6028+
a_3	617 228-	27 241-	3398+	396 121+	279 831+	3890+
a_4	30 636-	56 273+	663-	2 995+	3 639-	68+
a_5	12 241+	1 042-		173-	1 224+	
August 19						
a_0	91.7710 874+	28.6195 142+	0.9349 4026+	187.1722 192+	4.3849 549-	0.9003 4293+
a_1	14.4746 344+	0.2740 464-	0.0097 2813-	10.4316 394+	5.6195 182-	0.0017 4067+
a_2	1751 366-	7667 947-	6 7653+	880 924+	664 180+	9 8051+
a_3	619 789-	185 859+	756+	406 111+	277 592+	4172+
a_4	33 355+	50 370+	348-	2 390+	2 558+	102-
a_5	7 807+	3 838-		621-	1 365+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
August 28						
a_0	197.7327 389+	9.9099 034-	0.9031 0481+	306.8182 913+	23.4270 393-	0.9983 5554+
a_1	10.7303 012+	5.4016 986-	0.0038 2279+	15.1071 238+	4.2594 737+	0.0141 4651+
a_2	2107 428+	1525 988+	10 9893+	2600 693-	7908 450+	12 3768-
a_3	408 690+	301 419+	3778+	385 358-	464 572-	2 7631-
a_4	373-	9 557+	307-	107 599+	67 379-	821+
a_5	1 951-	1 284+		2 826-	5 336+	
August 29						
a_0	208.7144 196+	15.1277 772-	0.9080 6125+	321.6372 872+	18.4293 821-	1.0109 9628+
a_1	11.2732 667+	5.0016 112-	0.0061 2173+	14.5129 987+	5.6775 080+	0.0108 7507+
a_2	3311 783+	2500 487+	11 9310+	3139 879-	6163 895+	20 1260-
a_3	386 380+	352 086+	2565+	14 095+	680 974-	2 4312-
a_4	9 855-	16 344+	552-	90 483+	40 160-	2374+
a_5	4 231-	618+		7 330-	4 814+	
August 30						
a_0	220.3560 940+	19.8424 349-	0.9153 9622+	335.8460 227+	12.2071 167-	1.0196 3939+
a_1	12.0454 775+	4.3890 434-	0.0085 6285+	13.9217 798+	6.6923 364+	0.0062 1563+
a_2	4369 410+	3661 077+	12 3607+	2628 179-	3928 148+	25 9625-
a_3	303 356+	422 596+	372+	302 959+	794 125-	1 4545-
a_4	31 459-	20 004+	840-	52 672+	16 099-	3445+
a_5	6 576-	1 166-		6 755-	3 668+	
August 31						
a_0	232.8650 447+	23.8212 273-	0.9251 9045+	349.5398 722+	5.2026 210-	1.0231 4776+
a_1	12.9944 961+	3.5226 341-	0.0110 1255+	13.5047 246+	7.2351 220+	0.0007 2476+
a_2	5024 642+	5037 286+	11 9586+	1470 799-	1485 845+	28 2590-
a_3	112 245+	489 216+	2984-	446 883+	822 460-	384-
a_4	66 510-	14 569+	1155-	19 109+	2 153+	3455+
a_5	5 956-	4 198-		5 319-	2 606+	
September 1						
a_0	246.3659 828+	26.7901 741-	0.9373 5748+	2.9435 841+	2.0993 154+	1.0210 7733+
a_1	14.0035 245+	2.3646 866-	0.0132 6853+	13.3496 140+	7.2877 162+	0.0048 0020-
a_2	4902 293+	6550 270+	10 3616+	68 635-	942 595-	26 3333-
a_3	209 032-	503 966+	7631-	470 290+	788 261-	1 3709+
a_4	99 472-	7 086-	1439-	7 028-	14 982+	2400+
a_5	1 503+	6 997-		5 026-	1 793+	
September 2						
a_0	260.8290 365+	28.4508 454-	0.9515 7147+	16.3321 583+	9.2156 235+	1.0138 0487+
a_1	14.8822 487+	0.9097 748-	0.0150 5432+	13.4716 496+	6.8696 078+	0.0095 5959-
a_2	3693 424+	7949 414+	7 2054+	1249 780+	3199 620-	20 8281-
a_3	585 460-	405 995+	1 3467-	391 707+	710 516-	2 3347+
a_4	91 682-	43 967-	1561-	32 271-	23 575+	853+
a_5	13 151+	6 482-		5 466-	1 604+	
September 3						
a_0	276.0142 285+	28.5301 242-	0.9671 9604+	29.9641 828+	15.6967 356+	1.0024 0446+
a_1	15.4152 022+	0.7810 839+	0.0160 2884+	13.8234 777+	6.0267 616+	0.0129 9076-
a_2	1519 227+	8838 600+	2 2360+	2176 410+	5173 718-	13 3541-
a_3	818 582-	167 944+	1 9864-	208 673+	599 876-	2 6614+
a_4	20 460-	77 594-	1324-	60 920-	31 349+	503-
a_5	17 039+	1 760-		4 373-	2 166+	
September 4						
a_0	291.4991 531+	26.8563 211-	0.9832 3661+	44.0196 394+	21.1494 893+	0.9883 3940+
a_1	15.4737 984+	2.5672 757+	0.0158 2707+	14.2948 127+	4.8256 783+	0.0148 8339-
a_2	888 379-	8859 391+	4 4926-	2392 873+	6763 535-	5 6967-
a_3	734 817-	157 142-	2 5355-	75 691-	452 645-	2 4405+
a_4	68 386+	85 544-	532-	84 796-	42 567+	1300-
a_5	8 209+	3 355+		875+	2 542+	

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 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
September 13						
a_0	58-5377 784+	25-2580 605+	0-9731 1739+	163-6654 651+	8-3044 084+	0-9001 3555+
a_1	14-7172 086+	3-3554 738+	0-0153 4266-	10-6134 039+	5-4888 950-	0-0018 2896-
a_2	1665 762+	7840 521-	8370+	1638 914-	1323 777-	7 7579+
a_3	401 589-	257 780-	1 9051+	373 729+	305 913+	2010-
a_4	80 502-	56 196+	1540-	3 173+	6 449-	291+
a_5	8 988+	1 149+		512-	919+	
September 14						
a_0	73-3742 530+	27-8094 387+	0-9580 3354+	174-1526 166+	2-7131 740+	0-8990 6519+
a_1	14-9021 816+	1-7330 852+	0-0146 6537-	10-3987 534+	5-6639 966-	0-0003 2603-
a_2	68 315+	8265 144-	5 6322+	503 785-	435 531-	7 3306+
a_3	631 614-	23 277-	1 2808+	381 470+	289 324+	824-
a_4	32 311-	62 279+	1411-	820+	1 804-	327+
a_5	12 838+	2 015-		219-	943+	
September 15						
a_0	88-2181 576+	28-7197 081+	0-9440 4536+	184-5391 986+	2-9655 293-	0-8994 6725+
a_1	14-7198 501+	0-0969 742+	0-0132 1114-	10-4126 553+	5-6645 555-	0-0011 2846+
a_2	1891 594-	7981 579-	8 6373+	643 375+	431 062+	7 2784+
a_3	635 076-	204 277+	7135+	382 358+	291 520+	505+
a_4	34 842+	51 354+	1111-	77-	2 970+	293+
a_5	8 081+	4 518-		571-	920+	
September 16						
a_0	102-6896 332+	28-0436 358+	0-9317 5819+	195-0543 624+	8-5574 376-	0-9013 3154+
a_1	14-1689 773+	1-4197 757-	0-0113 1407-	10-6557 202+	5-4892 394-	0-0026 1104+
a_2	3507 031-	7105 951-	10 1217+	1784 307+	1332 660+	7 6027+
a_3	419 395-	364 506+	2691+	375 742+	312 494+	1699+
a_4	74 759+	27 725+	772-	2 684-	7 686+	191+
a_5	43+	4 482-		1 621-	763+	
September 17						
a_0	116-4734 480+	25-9520 399+	0-9214 7549+	205-9256 572+	13-8813 168-	0-9047 2176+
a_1	13-3716 727+	2-7227 628-	0-0092 3985-	11-1234 186+	5-1255 043-	0-0041 9022+
a_2	4316 542-	5890 943-	10 4760+	2879 238+	2323 922+	8 2220+
a_3	122 569-	431 585+	382-	347 816+	350 540+	2484+
a_4	72 860+	4 997+	456-	10 628-	11 742+	25+
a_5	4 471-	2 693-		3 325-	222+	
September 18						
a_0	129-4080 485+	22-6835 717+	0-9132 7485+	217-3703 858+	18-7381 783-	0-9097 5927+
a_1	12-4985 016+	3-7708 215-	0-0071 7437-	11-7976 952+	4-5507 512-	0-0059 1014+
a_2	4292 009-	4593 100-	10 0959+	3825 597+	3448 274+	8 9749+
a_3	123 958+	425 702+	2191-	271 118+	399 000+	2601+
a_4	49 147+	8 228-	188-	27 635-	13 217+	202-
a_5	4 679-	843-		5 000-	1 026-	
September 19						
a_0	141-4941 918+	18-4951 033+	0-9070 8628+	229-5744 890+	22-9029 830-	0-9165 9088+
a_1	11-6946 080+	4-5654 422-	0-0052 2842-	12-6305 971+	3-7366 248-	0-0077 7506+
a_2	3672 102-	3373 738-	9 3328+	4422 916+	4714 351+	9 6250+
a_3	274 653+	385 025+	2924-	110 919+	440 463+	1809+
a_4	25 438+	12 105-	29+	54 152-	8 318+	485-
a_5	3 061-	290+		4 560-	3 023-	
September 20						
a_0	152-8512 926+	13-6296 084+	0-9027 6219+	242-6525 984+	26-1235 969-	0-9253 4167+
a_1	11-0512 302+	5-1293 786-	0-0034 4842-	13-5245 212+	2-6598 019-	0-0097 3492+
a_2	2726 108-	2288 355-	8 4779+	4384 829+	6055 361+	9 8663+
a_3	346 716+	339 796+	2791-	148 291-	442 500+	120-
a_4	10 283+	10 429-	190+	79 196-	7 208-	813-
a_5	1 468-	774+		598+	4 839-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
September 29						
a_0	256.5929 138+	28.1348 174-	0.9360 5389+	10.1517 754+	5.9840 460+	1.0220 5904+
a_1	14.3256 303+	1.3212 821-	0.0116 7205+	13.5166 783+	7.1823 227+	0.0022 7982-
a_2	3470 726+	7291 059+	9 3317+	1485 187+	1816 090-	27 9020-
a_3	454 319-	365 434+	3377-	431 681+	813 823-	4089+
a_4	76 445-	32 562-	1156-	22 877-	2 103+	3277+
a_5	9 158+	4 622-		6 635-	3 656+	
September 30						
a_0	271.2134 562+	28.6941 686-	0.9486 1378+	23.8571 893+	12.9039 532+	1.0170 6266+
a_1	14.8574 858+	0.2312 273+	0.0133 9080+	13.9307 522+	6.5776 280+	0.0076 0637-
a_2	1741 162+	8145 649+	7 6161+	2576 412+	4208 383-	24 7464-
a_3	666 171-	190 585+	8042-	273 872+	768 322-	1 7422+
a_4	27 238-	56 496-	1437-	57 396-	20 393+	2058+
a_5	13 457+	1 732-		6 705-	4 604+	
October 1						
a_0	286.1770 631+	27.6351 406-	0.9626 7139+	38.0665 598+	18.9864 105+	1.0071 7644+
a_1	15.0016 949+	1.8940 723+	0.0146 1522+	14.5018 915+	5.5159 141+	0.0119 5069-
a_2	285 754-	8361 181+	4 3393+	2986 183+	6344 870-	18 3329-
a_3	643 228-	50 853-	1 3888-	19 745-	640 637-	2 5642+
a_4	43 271+	64 671-	1510-	93 780-	43 993+	506+
a_5	8 555+	1 581+		1 618-	4 822+	
October 2						
a_0	301.0910 423+	24.9163 445-	0.9775 6657+	52.8555 553+	23.8086 555+	0.9936 5392+
a_1	14.7731 519+	3.5259 764+	0.0150 0596+	15.0548 956+	4.0747 549+	0.0148 2788-
a_2	1870 341-	7836 547+	7221-	2347 909+	7954 416-	10 3756-
a_3	389 378-	292 968-	2 0093-	405 069-	417 771-	2 7498+
a_4	85 564+	55 788-	1171-	103 097-	69 398+	744-
a_5	1+	2 844+		9 061+	2 582+	
October 3						
a_0	315.6467 788+	20.6413 046-	0.9922 8769+	68.0953 314+	27.0533 898+	0.9780 5602+
a_1	14.3164 908+	4.9845 015+	0.0142 1180+	15.3662 564+	2.3875 852+	0.0161 0791-
a_2	2525 399-	6651 398+	7 4242-	605 277+	8765 438-	2 5934-
a_3	50 002-	487 923-	2 4972-	722 900-	117 115-	2 4333+
a_4	83 405+	41 232-	257-	53 904-	82 898+	1412-
a_5	4 966-	2 343+		16 334+	2 317-	
October 4						
a_0	329.7135 734+	15.0443 445-	1.0055 0479+	83.4460 686+	28.5607 777+	0.9619 1798+
a_1	13.8272 884+	6.1530 824+	0.0119 6747+	15.2570 420+	0.6313 593+	0.0159 5315-
a_2	2224 829-	4963 623+	15 0259-	1722 833-	8642 746-	3 8543+
a_3	233 445+	629 734-	2 6116-	777 765-	189 038+	1 8550+
a_4	57 345+	29 795-	1170+	32 540+	70 038+	1562-
a_5	5 686-	1 780+		11 554+	6 369-	
October 5						
a_0	343.3468 893+	8.4606 747-	1.0157 2022+	98.4574 602+	28.3531 332+	0.9465 2013+
a_1	13.4724 516+	6.9458 589+	0.0082 2566+	14.6979 266+	1.0156 475-	0.0146 8832-
a_2	1237 301-	2913 391+	22 1130-	3745 386-	7719 330-	8 4868+
a_3	406 238+	731 013-	2 1349-	538 121-	405 420+	1 2235+
a_4	28 891+	21 244-	2663+	90 110+	36 513+	1399-
a_5	5 101-	1 984+		644+	6 432-	
October 6						
a_0	356.7386 136+	1.2985 040-	1.0215 4773+	112.7361 114+	26.6091 028+	0.9327 8886+
a_1	13.3558 688+	7.3017 284+	0.0032 6928+	13.8237 715+	2.4264 951-	0.0126 7987-
a_2	103 813+	612 698+	26 8935-	4813 091-	6348 384-	11 3269+
a_3	470 618+	795 734-	1 0387-	174 997-	488 672+	6622+
a_4	3 866+	11 479-	3525+	90 354+	3 848+	1109-
a_5	5 368-	2 730+		5 806-	3 688-	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
October 15						
a_0	126-0695 289+	23-5966 525+	0-9212 9681+	214-5142 285+	17-5575 127-	0-9099 1379+
a_1	12-8418 921+	3-5498 721-	0-0102 6019-	11-7032 707+	4-7276 936-	0-0050 9180+
a_2	4854 306-	4896 104-	12 6574+	3677 730+	3200 692+	5 6437+
a_3	128 080+	468 774+	2192+	262 614+	410 926+	1112-
a_4	59 430+	14 194-	806-	29 014-	12 966+	292+
a_5	6 092-	909-		4 762-	1 472-	
October 16						
a_0	138-4441 323+	19-6025 371+	0-9123 1622+	226-6081 561+	21-9228 951-	0-9155 6176+
a_1	11-9301 837+	4-3945 909-	0-0076 9519-	12-5036 156+	3-9598 292-	0-0061 9889+
a_2	4174 463-	3583 958-	12 8399+	4243 645+	4496 561+	5 4815+
a_3	306 125+	403 847+	1018-	99 374+	447 025+	85+
a_4	28 607+	18 219-	535-	54 320-	5 712+	164+
a_5	3 857-	692+		4 158-	3 300-	
October 17						
a_0	149-9899 572+	14-8881 823+	0-9058 8949+	239-5402 257+	25-3881 245-	0-9223 1129+
a_1	11-1966 452+	4-9971 695-	0-0051 7915-	13-3583 551+	2-9257 760-	0-0073 0431+
a_2	3122 989-	2474 763-	12 2206+	4173 955+	5838 832+	5 5987+
a_3	383 186+	338 246+	3146-	156 539-	436 149+	766+
a_4	9 579+	14 431-	304-	77 176-	11 319-	49-
a_5	1 763-	1 284+		916+	4 621-	
October 18						
a_0	160-9134 038+	9-6760 464+	0-9018 9789+	253-2926 964+	27-6879 963-	0-9301 8264+
a_1	10-6899 551+	5-3957 787-	0-0028 4160-	14-1157 810+	1-6340 017-	0-0084 4509+
a_2	1933 544-	1533 747-	11 1002+	3250 423+	7033 000+	5 7905+
a_3	404 576+	293 407+	4355-	451 600-	345 170+	590+
a_4	1 082+	7 854-	107-	72 690-	35 547-	332-
a_5	559-	1 351+		8 955+	3 784-	
October 19						
a_0	171-4505 145+	4-1555 834+	0-9001 2169+	267-6819 864+	28-5881 141-	0-9392 0935+
a_1	10-4247 730+	5-6169 721-	0-0007 5649-	14-6057 916+	0-1399 581-	0-0096 0760+
a_2	718 885-	687 121-	9 7347+	1549 490+	7817 296+	5 7580+
a_3	403 522+	275 431+	4775-	650 718-	166 934+	732-
a_4	1 456-	1 025-	63+	24 687-	55 084-	657-
a_5	191-	1 215+		12 775+	586-	
October 20						
a_0	181-8435 864+	1-5025 388-	0-9002 9155+	282-3764 641+	27-9352 161-	0-9493 7886+
a_1	10-4013 742+	5-6715 702-	0-0010 4971+	14-7169 820+	1-4512 585+	0-0107 1096+
a_2	481 056+	145 181+	8 3441+	422 621-	7981 837+	5 1346+
a_3	395 574+	283 344+	4514-	624 286-	57 521-	3374-
a_4	2 193-	5 118+	202+	42 117+	57 323-	971-
a_5	535-	983+		8 066+	2 506+	
October 21						
a_0	192-3323 508+	7-1306 465-	0-9021 3256+	296-9937 736+	25-6970 078-	0-9605 5982+
a_1	10-6151 116+	5-5549 927-	0-0025 9120+	14-4660 430+	3-0086 940+	0-0115 9778+
a_2	1649 293+	1035 772+	7 1140+	1962 191-	7490 549+	3 5331+
a_3	380 844+	313 417+	3690-	379 609-	261 362-	7309-
a_4	4 646-	10 159+	298+	81 966+	43 693-	1187-
a_5	1 580-	599+		114+	3 153+	
October 22						
a_0	203-1498 536+	12-5496 445-	0-9054 0124+	311-2338 445+	21-9694 491-	0-9724 2596+
a_1	11-0565 733+	5-2494 513-	0-0039 1525+	13-9925 599+	4-4124 930+	0-0120 3762+
a_2	2748 160+	2042 998+	6 1871+	2608 394-	6475 894+	6291+
a_3	345 517+	359 599+	2475-	53 267-	405 356-	1 2155-
a_4	12 425-	13 375+	334+	80 488+	27 501-	1173-
a_5	3 236-	140-		4 427-	1 777+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
October 31						
a_0	324.9678 444+	16.9524 747-	0.9843 9321+	77.1014 781+	28.0225 989+	0.9793 8631+
a_1	13.4848 817+	5.5759 515+	0.0117 5182+	15.7540 580+	1.3636 207+	0.0146 3745-
a_2	2329 726-	5112 551+	3 7084-	490 743-	9212 655-	6 8272-
a_3	224 039+	498 476-	1 6987-	957 284-	28 755+	2 4255+
a_4	57 146+	18 887-	780-	8 194-	100 288+	653-
a_5	4 942-	199+		19 428+	6 093-	
November 1						
a_0	338.2473 778+	10.9169 845-	0.9955 9653+	92.7118 569+	28.4772 490+	0.9643 0215+
a_1	13.1065 364+	6.4414 628+	0.0104 6927+	15.3751 458+	0.4332 188-	0.0153 0146-
a_2	1364 164-	3505 705+	9 2458-	3217 054-	8585 992-	404+
a_3	403 619+	572 370-	2 0247-	802 987-	367 124+	2 1497+
a_4	32 404+	18 437-	69+	91 967+	67 032+	1186-
a_5	4 167-	391-		6 129+	9 305-	
November 2						
a_0	351.2606 834+	4.1840 711-	1.0049 3946+	107.6948 081+	27.2279 161+	0.9492 0784+
a_1	12.9656 673+	6.9633 233+	0.0080 1546+	14.5306 768+	2.0181 168-	0.0146 9595-
a_2	476-	1673 980+	15 2419-	5013 443-	7175 711-	5 7736+
a_3	491 464+	649 623-	2 0025-	380 622-	543 607+	1 6651+
a_4	12 155+	20 932-	1247+	119 023+	18 885+	1325-
a_5	4 331-	299+		5 822-	6 668-	
November 3						
a_0	4.2762 319+	2.8796 247+	1.0112 4295+	121.6973 984+	24.5478 106+	0.9352 4251+
a_1	13.1157 056+	7.0950 114+	0.0044 1625+	13.4584 965+	3.2859 523-	0.0130 9473-
a_2	1503 610+	397 562-	20 4674-	5499 900-	5498 228-	9 9770+
a_3	495 714+	729 287-	1 4932-	35 584+	554 864+	1 1300+
a_4	8 924-	19 897-	2356+	86 468+	14 220-	1222-
a_5	6 206-	2 144+		8 417-	2 432-	
November 4						
a_0	17.5903 570+	9.8601 760+	1.0134 8671+	134.6172 684+	20.7658 567+	0.9232 4625+
a_1	13.5584 668+	6.7898 296+	0.0000 3081-	12.3995 730+	4.2260 395-	0.0108 0925-
a_2	2875 062+	2683 401-	23 5171-	4958 665-	3943 162-	12 6397+
a_3	396 681+	785 869-	5253-	298 687+	475 317+	6396+
a_4	40 437-	9 445-	2887+	43 428+	25 599-	1021-
a_5	8 577-	4 848+		5 799-	399+	
November 5						
a_0	31.4710 966+	16.3026 188+	1.0110 8053+	146.5546 064+	16.1905 126+	0.9137 5473+
a_1	14.2320 226+	6.0160 375+	0.0047 7618-	11.5119 209+	4.8821 156-	0.0081 3024-
a_2	3736 275+	5049 136-	23 3707-	3860 000-	2666 733-	13 9528+
a_3	150 232+	773 737-	6572+	416 154+	377 624+	2319+
a_4	86 253-	15 221+	2559+	14 718+	23 052-	808-
a_5	6 995-	7 422+		2 742-	1 588+	
November 6						
a_0	46.0824 450+	21.7386 333+	1.0040 5858+	157.7233 402+	11.0773 396+	0.9070 3488+
a_1	14.9863 604+	4.7838 880+	0.0091 5072-	10.8692 853+	5.3106 016-	0.0053 0242-
a_2	3598 923+	7204 543-	19 8949-	2550 594-	1656 251-	14 1696+
a_3	258 659-	638 852-	1 6959+	448 707+	301 466+	903-
a_4	125 212-	54 145+	1541+	1 469+	14 850-	621-
a_5	3 624+	7 215+		858-	1 857+	
November 7						
a_0	61.3906 730+	25.7443 178+	0.9931 0337+	168.3824 979+	5.6299 601+	0.9031 3419+
a_1	15.5802 902+	3.1765 829+	0.0125 5928-	10.4939 380+	5.5564 238-	0.0025 2040-
a_2	2108 145+	8723 783-	13 9200-	1204 196-	822 366-	13 5314+
a_3	715 441-	353 271-	2 3104+	446 436+	260 583+	3379-
a_4	105 480-	92 332+	320+	2 467-	5 459-	461-
a_5	17 923+	1 703+		137-	1 766+	

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
November 16						
a_0	178-8003 996+	0-0169 888+	0-9019 2855+	278-9932 338+	28-0504 740-	0-9486 6632+
a_1	10-3859 742+	5-6440 228-	0-0000 6611+	14-8238 832+	1-1246 500+	0-0080 9076+
a_2	118 975+	55 694-	12 2461+	429 457-	8060 710+	1174+
a_3	435 089+	256 272+	5220-	726 498-	60 549-	795-
a_4	2 855-	3 445+	313-	39 608+	67 242-	11+
a_5	324-	1 533+		10 220+	3 584+	
November 17						
a_0	189-2414 623+	5-6064 783-	0-9031 6394+	293-7065 044+	26-1321 736-	0-9567 6098+
a_1	10-5389 908+	5-5761 357-	0-0023 4621+	14-5409 849+	2-6935 241+	0-0080 9083+
a_2	1403 908+	749 152+	10 4972+	2269 151-	7511 674+	1238-
a_3	419 824+	285 138+	6475-	471 232-	292 894-	743-
a_4	4 185-	11 254+	160-	90 404+	47 763-	288-
a_5	1 348-	1 111+		547+	4 894+	
November 18						
a_0	199-9622 730+	11-0779 484-	0-9064 9351+	307-9825 459+	22-7210 585-	0-9648 2911+
a_1	10-9433 695+	5-3357 075-	0-0042 4498+	13-9822 132+	4-0913 305+	0-0080 3222+
a_2	2624 815+	1683 246+	8 4637+	3135 340-	6395 458+	5286-
a_3	388 541+	340 757+	7120-	107 442-	435 940-	1916-
a_4	10 702-	17 084+	5+	90 560+	22 544-	573-
a_5	3 200-	259+		5 121-	3 177+	
November 19						
a_0	211-2055 880+	16-2095 212-	0-9115 1372+	321-6490 247+	18-0357 129-	0-9727 8359+
a_1	11-5790 118+	4-8898 696-	0-0057 2435+	13-3565 753+	5-2322 083+	0-0078 4611+
a_2	3694 182+	2810 676+	6 3363+	2965 760-	4984 122+	1 4523-
a_3	312 579+	410 741+	7096-	203 252+	495 726-	4257-
a_4	26 943-	18 762+	175+	63 364+	6 809-	750-
a_5	5 280-	1 355-		5 536-	741+	
November 20						
a_0	223-1820 536+	20-7755 084-	0-9178 0249+	334-7351 319+	12-3552 717-	0-9804 3441+
a_1	12-3982 048+	4-1976 875-	0-0067 8574+	12-8469 778+	6-0779 601+	0-0073 9792+
a_2	4417 231+	4141 955+	4 3170+	2031 217-	3463 429+	3 1782-
a_3	151 989+	470 882+	6382-	402 167+	516 498-	7336-
a_4	54 836-	12 202+	321+	35 519+	3 587-	723-
a_5	5 465-	3 729-		4 026-	901-	
November 21						
a_0	236-0311 501+	24-5110 648-	0-9249 5933+	347-4223 539+	5-9830 673-	0-9874 3391+
a_1	13-3025 865+	3-2250 175-	0-0074 7055+	12-5735 796+	6-6138 105+	0-0065 1321+
a_2	4489 147+	5590 446+	2 5977+	651 795-	1883 317+	5 8032-
a_3	119 113-	481 308+	5070-	504 394+	540 125-	1 0323-
a_4	84 773-	7 008-	405+	15 952+	8 620-	416-
a_5	521-	5 723-		3 271-	1 358-	
November 22						
a_0	249-7622 107+	27-1301 799-	0-9326 4300+	359-9824 616+	0-7640 645+	0-9932 5941+
a_1	14-1305 232+	1-9681 995-	0-0078 5420+	12-5992 829+	6-8243 102+	0-0050 2619+
a_2	3617 842+	6934 880+	1 3189+	924 495+	197 549+	9 1316-
a_3	458 057-	396 477+	3415-	534 832+	587 709-	1 2066-
a_4	88 183-	37 124-	387+	376+	15 990-	173+
a_5	9 078+	5 050-		4 403-	548-	
November 23						
a_0	264-2008 020+	28-3694 612-	0-9405 9881+	12-7272 745+	7-5477 050+	0-9972 5352+
a_1	14-6859 469+	0-4796 505-	0-0080 3104+	12-9425 769+	6-6808 403+	0-0028 4479+
a_2	1805 865+	7850 915+	5225+	2487 258+	1667 095-	12 6249-
a_3	716 798-	199 802+	1828-	490 663+	655 817-	1 1392-
a_4	39 172-	63 423-	251+	21 239-	19 395-	920+
a_5	14 954+	919-		7 306-	1 723+	
November 24						
November 25						
November 26						
November 27						
November 28						
November 29						
November 30						
December 1						

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
December 2						
a_0	25.9647 889+	13.9944 869+	0.9987 3109+	142.3108 530+	17.6528 823+	0.9241 6816+
a_1	13.5750 769+	6.1437 839+	0.0000 1486+	12.0044 658+	4.7723 532-	0.0103 2848-
a_2	3758 538+	3733 753-	15 4708-	4636 461-	3068 171-	10 4264+
a_3	331 552+	714 072-	7638-	383 389+	461 436+	1 0176+
a_4	59 137-	11 216-	1576+	30 138+	29 271-	938-
a_5	9 439-	5 386+		4 623-	1 029+	
December 3						
a_0	39.9420 172+	19.6929 052+	0.9971 3826+	153.8925 629+	12.6170 314+	0.9149 7471+
a_1	14.3978 818+	5.1810 216+	0.0032 4531-	11.2019 366+	5.2587 494-	0.0079 7543-
a_2	4303 349+	5889 291-	16 8077-	3351 638-	1849 127-	12 9188+
a_3	3 530+	703 269-	1184-	459 355+	355 175+	6411+
a_4	110 638-	16 537+	1868+	7 547+	23 665-	865-
a_5	4 666-	8 700+		1 779-	1 906+	
December 4						
a_0	54.7590 564+	24.2171 945+	0.9922 1903+	164.8058 480+	7.2067 109+	0.9083 4662+
a_1	15.2130 387+	3.8031 457+	0.0065 6753-	10.6715 464+	5.5305 350-	0.0052 3394-
a_2	3602 998+	7812 488-	16 0480-	1946 023-	906 498-	14 3258+
a_3	477 299-	550 927-	6448+	472 587+	279 684+	2952+
a_4	137 112-	62 766+	1663+	875-	13 941-	776-
a_5	10 286+	7 475+		352-	2 067+	
December 5						
a_0	70.2719 825+	27.1910 229+	0.9841 2781+	175.3299 281+	1.6123 070+	0.9045 6702+
a_1	15.7407 603+	2.1042 052+	0.0095 1713-	10.4235 922+	5.6324 727-	0.0023 1125-
a_2	1452 052+	9013 639-	13 1347-	536 989-	130 409-	14 7480+
a_3	916 176-	229 464-	1 3191+	465 732+	244 542+	147-
a_4	80 290-	102 157+	1054+	2 283-	3 525-	703-
a_5	22 748+	288-		72-	1 983+	
December 6						
a_0	86.0605 763+	28.3811 046+	0.9734 3965+	185.7461 591+	4.0089 066-	0.9037 2208+
a_1	15.7355 686+	0.2733 480+	0.0117 0617-	10.4549 642+	5.5856 109-	0.0006 0585+
a_2	1549 611-	9092 227-	8 5683-	845 834+	601 912+	14 2843+
a_3	1013 228-	171 778+	1 7408+	455 477+	250 136+	2953-
a_4	41 438+	98 891+	298+	2 301-	6 491+	646-
a_5	16 396+	8 394-		759-	1 760+	
December 7						
a_0	101.5456 443+	27.7714 575+	0.9610 5371+	196.3309 485+	9.5084 877-	0.9057 2038+
a_1	15.1464 329+	1.4582 058-	0.0128 8571-	10.7594 726+	5.3867 122-	0.0033 4829+
a_2	4176 771-	8067 932-	3 1873-	2190 920+	1408 902+	13 0129+
a_3	692 545-	482 578+	1 8535+	437 692+	293 361+	5541-
a_4	122 974+	53 795+	351-	5 727-	15 530+	586-
a_5	33-	9 683-		2 463-	1 199+	
December 8						
a_0	116.2174 397+	25.5591 276+	0.9480 3111+	207.3524 633+	14.7233 007-	0.9103 0869+
a_1	14.1524 784+	2.9103 377-	0.0129 8118-	11.3254 388+	5.0101 134-	0.0057 6119+
a_2	5517 592-	6394 402-	2 1502+	3445 012+	2394 229+	11 0022+
a_3	206 109-	603 131+	1 7050+	388 694+	366 676+	7901-
a_4	117 992+	4 382+	760-	17 909-	21 982+	490-
a_5	8 809-	5 648-		5 027-	145-	
December 9						
a_0	129.8084 663+	22.0695 361+	0.9354 2784+	219.0589 791+	19.4551 399-	0.9170 8619+
a_1	13.0299 195+	4.0093 455-	0.0120 7011-	12.1213 704+	4.4125 474-	0.0077 0500+
a_2	5516 447-	4615 109-	6 8034+	4453 224+	3624 780+	8 3433+
a_3	177 949+	566 619+	1 3941+	265 788+	451 667+	9886-
a_4	71 383+	23 224-	932-	43 980-	21 790+	324-
a_5	8 212-	1 370-		6 941-	2 700-	

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 where p is the fraction of a day from 0^h TT.

DAILY POLYNOMIAL COEFFICIENTS

	Apparent Right Ascension	Apparent Declination	Horizontal Parallax	Apparent Right Ascension	Apparent Declination	Horizontal Parallax
December 18						
a_0	231.6471 584+	23.4581 336-	0.9255 2343+	344.5245 681+	7.1911 474-	0.9842 3625+
a_1	13.0706 918+	3.5447 287-	0.0090 6413+	12.5732 141+	6.5120 821+	0.0025 1942+
a_2	4916 878+	5083 515+	5 1913+	1564 945-	1846 032+	6 2847-
a_3	22 067+	509 993+	1 1207-	489 720+	554 925-	1954+
a_4	81 495-	8 240+	71-	20 093+	5 644+	356-
a_5	4 415-	5 943-		3 369-	1 180-	
December 19						
a_0	245.2031 537+	26.4432 818-	0.9349 9392+	356.9919 322+	0.5495 081-	0.9861 4318+
a_1	14.0258 930+	2.3747 047-	0.0097 6333+	12.4134 940+	6.7164 788+	0.0013 0683+
a_2	4449 571+	6603 293+	1 7965+	8 815-	203 251+	5 9157-
a_3	342 470-	482 797+	1 1504-	536 437+	544 273-	464+
a_4	106 255-	22 946-	248+	4 000+	752-	474-
a_5	5 397+	7 340-		3 307-	1 407-	
December 20						
a_0	259.6296 710+	28.1124 062-	0.9448 2435+	9.4582 577+	6.1326 525+	0.9868 5834+
a_1	14.7732 745+	0.9220 520-	0.0097 8747+	12.5726 063+	6.5928 439+	0.0001 1861+
a_2	2838 922+	7840 308+	1 4957-	1591 503+	1448 244-	6 0579-
a_3	707 672-	319 499+	1 0495-	518 285+	560 751-	1502-
a_4	76 973-	61 714-	567+	11 900-	8 379-	375-
a_5	16 125+	4 038-		5 190-	386-	
December 21						
a_0	274.6099 858+	28.2250 527-	0.9543 6296+	22.2401 338+	12.5237 204+	0.9863 5239+
a_1	15.1060 297+	0.7151 617+	0.0091 9617+	13.0390 345+	6.1314 282+	0.0011 5308-
a_2	416 150+	8388 115+	4 2974-	3023 003+	3184 729-	6 7247-
a_3	854 657-	35 795+	8180-	417 320+	596 657-	3055-
a_4	9 564+	82 056-	787+	38 135-	10 969-	83-
a_5	15 491+	2 306+		7 862-	2 136+	
December 22						
a_0	289.6746 703+	26.6754 749-	0.9630 5546+	35.6186 008+	18.2761 267+	0.9844 9545+
a_1	14.9444 212+	2.3718 584+	0.0081 2279+	13.7496 468+	5.3121 698+	0.0025 9303-
a_2	1935 288-	8026 495+	6 2784-	3967 143+	5019 174-	7 6790-
a_3	667 582-	267 134-	4966-	186 610+	617 126-	3404-
a_4	88 729+	68 640-	821+	80 003-	442-	317+
a_5	4 329+	6 211+		7 386-	5 736+	
December 23						
a_0	304.3681 101+	23.5339 234-	0.9705 0896+	49.7748 839+	23.0251 959+	0.9811 0365+
a_1	14.3947 342+	3.8726 659+	0.0067 5102+	14.5633 745+	4.1258 904+	0.0042 1826-
a_2	3362 799-	6875 580+	7 2807-	3972 505+	6815 638-	8 4986-
a_3	274 628-	479 884-	1617-	202 017-	560 425-	2107-
a_4	107 482+	36 063-	646+	121 016-	29 671+	694+
a_5	4 885-	5 554+		1 622+	7 834+	
December 24						
a_0	318.4093 612+	19.0247 387-	0.9765 2219+	64.7033 678+	26.4172 305+	0.9760 2140+
a_1	13.6803 333+	5.0921 656+	0.0052 7221+	15.2496 906+	2.6104 169+	0.0059 5341-
a_2	3591 036-	5275 124+	7 3887-	2656 636+	8240 177-	8 7075-
a_3	105 159+	570 176-	1000+	661 927-	365 287-	736+
a_4	80 456+	8 075-	313+	112 474-	71 449+	917+
a_5	6 907-	2 725+		16 052+	4 595+	
December 25						
a_0	331.7484 618+	13.4626 133-	0.9810 6865+			
a_1	13.0224 045+	5.9742 672+	0.0038 3699+			
a_2	2862 000-	3543 331+	6 9123-			
a_3	358 875+	576 672-	2246+			
a_4	45 264+	5 122+	62-			
a_5	5 121-	207+				

Formula: Quantity in degrees = $a_0 + a_1 p + a_2 p^2 + a_3 p^3 + a_4 p^4 + a_5 p^5$
 where p is the fraction of a day from 0^h TT.